

ADDENDUM NO. 4

2 August 2023

Harrington Public Library

Bid Package B

Page 1

Bid opening has been extended to Tuesday, August 8, 2023 @ 2:00 PM.
The last day for questions has been extended to August 1, 2023 @ 2:00 PM.

NOTICE: Attach this addendum to the project manual for this project. It modifies and becomes a part of the contract documents. Work or materials not specifically mentioned herein are to be described in the main body of the specifications and as shown on the drawings. Bidders shall acknowledge receipt of this addendum on the space provided on the Bid Form. Failure to do so may subject the bidder to disqualification.

Whenever this Addendum modifies a portion of the Project Manual added information is shown as **Bold** and deleted information is shown as ~~striketrough~~.

The contract documents for the above referenced project, dated July 7, 2023, are amended as follows:

GENERAL CLARIFICATIONS:

1. **Add BIM Project Execution Plan for Harrington Public Library dated July 31, 2023 not included with original project manual. This is only applicable to Contractors whose contracts are responsible for BIM coordination noted in section 011100 – Summary of Work.**

QUESTIONS AND ANSWERS:

See attached RFI log dated 2 August 2023. Answers updated in Addendum 4 have been highlighted in green.

MODIFICATIONS TO SPECIFICATIONS:

1. **SECTION 000115 – LIST OF DRAWINGS**
 - a. Delete specification section 000115 – List of Drawings in it's entirety and insert revised Section 000115 – List of drawings, annotated Addendum No 4, dated 2 August 2023.
2. **SECTION 004100 – BID FORM**
 - a. Delete bid form for contract B-20 Fire Protection in it's entirety and insert revised bid form for Contract B-20, annotated Addendum No 4, 2 August 2023.





- b. Delete bid form for contract B-23 Electrical in it's entirety and insert revised bid form for Contract B-23, annotated Addendum No 4, dated 2 August 2023.
- 3. **SECTION 006216 – INSURANCE:** make the following pen and ink changes:
 - a. Insert sample certificate of insurance (COI) into specification section. Sample COI was included in original project manual dated 14 July, 2023, however was removed in Addendum 2 when revised specification section replaced original.
- 4. **SECTION 011100 – SUMMARY OF WORK:** make the following pen and ink changes:
 - a. Contract B-4 – Structural Steel & Miscellaneous Metals – Revise item 14 to the following: “14. Roof ladder by delegated design. Contractor shall provide security gate with roof ladder. Coordinate with metal framing and masonry Contractors for mounting conditions”.
 - b. Contract B-4 – Structural Steel & Miscellaneous Metals – **Add “20. Provide steel for roof screens. Perforated metal panel roof screens by contract B-08 – Exterior & Interior Panels”.**
 - c. Contract B-5 – Exterior Structural Stud Assembly, Metal Framing, & Drywall – Revise item 12 to the following “12. Batt insulation and spray foam insulation, both thermal and acoustical and related work”.
 - d. Contract B-6 – Carpentry and General Works – **Add “21. Provide wood joist ceilings, posts, and decorative steel brackets.”**
 - e. Contract B-6 – Carpentry and General Works – Item 8: **Add “k. pamphlet slat wall”.**
 - f. Contract B-8 – Exterior & Interior Panels – Revise item 1 to the following: “1. Provide panels and metal cladding materials at perimeter walls and all necessary anchoring devices. Cladding at edge of roofs by roofing contractor B-07.”
 - g. Contract B-8 – Exterior & Interior Panels – Item 5: **Add “and closure metal.”**
 - h. Contract B-8 – Exterior & Interior Panels – **Add “17. Provide furring hat channel at Soffit Type 2”.**
 - i. Contract B-8 – Exterior & Interior Panels – **Add “18. Provide break metal trim – painted black at type 4G walls.”**
 - j. Contract B-8 – Exterior & Interior Panels – **Add “19. Provide roof screen materials. Structural steel for roof screen support by others. See detail 12/S301.”**
 - k. Contract B-9 – Hollow metal Doors, Frames, and Finish Hardware – **Add “14. Provide door coat hooks as part of door hardware.”**
 - l. Contract B-13 – Paint and VWC – **Add “21. Painting of exterior fiber cement siding.”**
 - m. Contract B-14 – Flooring – Revise item 6 to the following: “6. Include a \$25,000 allowance for polished concrete to be used at the direction of Construction Manager and Owner.”
 - n. Contract B-16 – Specialties – Item 4 – **Add “k. Pamphlet Slat Wall”**





- o. Contract B-19 – Millwork & Casework – Revise item 18 to the following: “18. Provide steel support with signage over circulation desk to support lighting. Coordinate with electrical contractor for wiring pathways and light fixture mounting requirements.”
 - p. Contract B-19 – Millwork & Casework – **Add “21. Provide community information board. Board shall consist of plastic laminate on plywood-framed tackboard with lockable glass doors.”**
 - q. Contract B-19 – Millwork & Casework – **Add “22. Provide convenience shelves at toilet rooms per 4/A401.”**
5. **SECTION 012300 – ALTERNATES:** make the following pen and ink changes:
- a. ~~Delete~~ 3.2/I Add Alternate No. B-6 – Fire Pump.
6. **SECTION 013216 – CONSTRUCTION SCHEDULE:** make the following pen and ink changes:
- a. Remove pre-bid construction schedule dated 07/24/23 provided in Addendum 2 in its entirety and replace with pre-bid construction schedule dated 08/02/23 attached to this Addendum. Schedule reflects updates to durations for Structural Steel Erection & Decking, Install Perimeter Cold Formed Metal Framing, Sheathing & Waterproofing, and Installation of Doors, Frames, and Hardware.

MODIFICATIONS TO DRAWINGS:

- 1. Remove sheets S101, S102, S103, S301, A101, A102, A103, A104, A105, A107, A201, A301, A302, A303, A304, A501, A502, A510, A511, A521, A522, A523, A525, A602, A603, A604, A701, A702, A703, E-100, E-200, E-400, E-500, E-501, E-601, M-101, M-201, P-001, P-101, P-200, and P-300 from project manual and replace with sheets labeled in kind, annotated BP-B Addendum #4, dated 08/01/23.

LIST OF ATTACHMENTS:

Section 000115 – List of Drawings

Section 004100 – Bid Form Contract B-20 Fire Protection

Section 004100 – Bid Form Contract B-23 Electrical

Section 006216 Attachment - Sample Certificate of Insurance

Section 013216 Attachment - Pre-Bid Construction Schedule

BIM Project Execution Plan for Harrington Public Library dated 07/31/23

RFI Log, dated 08/02/23

Addendum #4 Narrative issued by Becker Morgan Group dated 08/02/23

Addendum #4 Drawings dated 08/01/23

End of Addendum No. 4



SECTION 000115 LIST OF DRAWINGS

<i>DRWG NO.</i>	<i>DRAWING NAME</i>	<i>BID PACKS</i>	<i>ISSUE DATE</i>	<i>LATEST REV. DATE</i>
G001	COVER SHEET	B	7/17/23	
G101	LIFE SAFETY PLAN AND CODE STUDY	B	7/17/23	
G501	U.L. RATED ASSEMBLIES	B	7/17/23	
C-001	COVER SHEET	B	7/7/23	
C-101	EXISTING CONDITIONS PLANS	B	7/7/23	
C201	SITE, SIGNAGE & STRIPING PLAN	B	7/7/23	
C-301	UTILITY PLAN	B	7/7/23	
C-401	GRADING PLAN	B	7/7/23	
C-500	SEDIMENT & STORMWATER COVER SHEET	B	7/7/23	
C-501	PRE SITE STORMWATER MANAGEMENT PLAN CONSTRUCTION	B	7/7/23	
C-502	POST SITE STORMWATER MANAGEMENT PLAN CONSTRUCTION	B	7/7/23	
C-503	EROSION AND SEDIMENT CONTROL DETAIL SHEET	B	7/7/23	
C-504	EROSION AND SEDIMENT CONTROL DETAIL SHEET	B	7/7/23	
C-601	ENTRANCE PLAN CONSTRUCTION, SIGNAGE & STRIPING PLAN	B	7/7/23	
C-602	ENTRANCE PLAN GRADING PLAN	B	7/7/23	
C-603	ENTRANCE PLAN EROSION & SEDIMENT CONTROL PLAN	B	7/7/23	
C-604	ENTRANCE PLAN EROSION & SEDIMENT CONTROL DETAILS	B	7/7/23	
C-605	ENTRANCE PLAN EROSION & SEDIMENT CONTROL DETAILS	B	7/7/23	
C-606	ENTRANCE PLAN CONSTRUCTION DETAILS & NOTES	B	7/7/23	
C-607	ENTRANCE PLAN TYPICAL SECTIONS	B	7/7/23	
C-608	ENTRANCE PLAN CROSS SECTIONS	B	7/7/23	
C-609	ENTRANCE PLAN CROSS SECTIONS	B	7/7/23	
C-610	ENTRANCE PLAN CROSS SECTIONS	B	7/7/23	
C-611	ENTRANCE PLAN CROSS SECTIONS	B	7/7/23	
C-612	ENTRANCE PLAN CROSS SECTIONS	B	7/7/23	
C-613	ENTRANCE PLAN CROSS SECTIONS	B	7/7/23	
C-901	CONSTRUCTION DETAILS	B	7/7/23	

<i>DRWG NO.</i>	<i>DRAWING NAME</i>	<i>BID PACKS</i>	<i>ISSUE DATE</i>	<i>LATEST REV. DATE</i>
C-902	CONSTRUCTION DETAILS	B	7/7/23	
L-001	LANDSCAPE PLAN 0153060	B	7/7/23	
S100	STRUCTURAL NOTES	B	7/17/23	
S101	FOUNDATION PLAN	B	7/17/23	8/1/23
S102	LOW ROOF FRAMING PLAN	B	7/17/23	8/1/23
S103	HIGH ROOF FRAMING PLAN	B	7/17/23	8/1/23
S201	TYPICAL SECTIONS & DETAILS	B	7/17/23	7/28/23
S202	TYPICAL SECTIONS & DETAILS	B	7/17/23	7/28/23
S203	FRAME ELEVATIONS	B	7/28/23	
S301	TYPICAL SECTIONS & DETAILS	B	7/17/23	8/1/23
S302	TYPICAL SECTIONS & DETAILS	B	7/17/23	7/28/23
A001	CONSTRUCTION TYPES-EXTERIOR WALLS	B	7/17/23	
A002	CONSTRUCTION TYPES-SLABS, CEILINGS, SOFFITS, ROOFS, AND FENCES	B	7/17/23	
A003	CONSTRUCTION TYPES-INTERIOR WALL TYPES	B	7/17/23	7/28/23
A100	ARCHITECTURAL SLAB EDGE PLAN	B	7/17/23	7/28/23
A101	FIRST FLOOR PLAN	B	7/17/23	8/1/23
A102	CLERESTORY FLOOR PLAN	B	7/17/23	8/1/23
A103	ROOF PLAN	B	7/17/23	8/1/23
A104	FIRST FLOOR REFLECTED CEILING PLAN	B	7/17/23	8/1/23
A105	FINISH FLOOR PLAN, SCHEDULE, AND LEGEND	B	7/17/23	8/1/23
A106	ARCHITECTURAL SITE PLAN	B	7/17/23	
A107	ADD ALTERNATES PLAN NORTH N	B	7/17/23	8/1/23
A201	EXTERIOR ELEVATIONS	B	7/17/23	8/1/23
A301	BUILDING SECTIONS	B	7/17/23	8/1/23
A302	WALL SECTIONS	B	7/17/23	8/1/23
A303	WALL SECTIONS	B	7/17/23	8/1/23
A304	WALL SECTIONS	B	7/17/23	8/1/23
A305	WALL SECTIONS	B	7/17/23	
A401	ENLARGED PLANS AND SECTIONS	B	7/17/23	7/28/23
A402	MILLWORK DETAILS	B	7/17/23	7/28/23
A403	MILLWORK DETAILS	B	7/17/23	7/28/23
A501	PLAN DETAILS	B	7/17/23	8/1/23
A502	PLAN DETAILS	B	7/17/23	8/1/23
A510	SECTION DETAILS/MISC. DETAILS	B	7/17/23	8/1/23
A511	SECTION DETAILS/MISC. DETAILS	B	7/17/23	8/1/23
A520	ROOF DETAILS-GABLE ROOFS	B	7/17/23	7/28/23
A521	ROOF DETAILS-GABLE ROOFS	B	7/17/23	8/1/23
A522	ROOF DETAILS-LARGE CONFERENCE ROOM	B	7/17/23	8/1/23

<i>DRWG NO.</i>	<i>DRAWING NAME</i>	<i>BID PACKS</i>	<i>ISSUE DATE</i>	<i>LATEST REV. DATE</i>
A523	ROOF DETAILS-PARAPETS	B	7/17/23	8/1/23
A524	ROOF DETAILS-CANOPY	B	7/17/23	
A525	ROOF DETAILS -STUDY ROOMS / MISC.	B	7/17/23	8/1/23
A530	TYPICAL MANUFACTURER'S DETAILS -TPO ROOFING	B	7/7/23	
A531	TYPICAL MANUFACTURER'S DETAILS -TPO ROOFING	B	7/17/23	
A532	TYPICAL MANUFACTURER'S DETAILS -TPO ROOFING	B	7/17/23	
A533	TYPICAL MANUFACTURER'S DETAILS -METAL ROOFING	B	7/17/23	
A534	TYPICAL AIR BARRIER/TRANSITION MEMBRANE DETAILS	B	07/28/23	
A601	DOOR AND WINDOW TYPES AND SCHEDULE	B	7/17/23	7/28/23
A602	STOREFRONT AND CURTAINWALL TYPES	B	7/17/23	8/1/23
A603	DOOR AND WINDOW DETAILS -HEADS	B	7/17/23	8/1/23
A604	DOOR AND WINDOW DETAILS -JAMBS	B	7/17/23	8/1/23
A605	DOOR AND WINDOW DETAILS -SILLS	B	7/17/23	7/28/23
A701	INTERIOR ELEVATIONS	B	7/17/23	8/1/23
A702	INTERIOR ELEVATIONS -ADULT COLLECTION AND LARGE CONFERENCE ROOM	B	7/17/23	8/1/23
A703	INTERIOR ELEVATIONS - CHILDREN'S COLLECTION AND TEEN LOUNGE	B	7/17/23	8/1/23
P-001	PLUMBING LEGEND	B	7/17/23	8/1/23
P-100	PLUMBING UNDERSLAB NEW WORK PLAN	B	7/17/23	
P-101	PLUMBING FIRST FLOOR NEW WORK PLAN	B	7/17/23	8/1/23
P-102	PLUMBING ROOF NEW WORK PLAN	B	7/17/23	
P-200	PLUMBING ENLARGED PLANS	B	7/17/23	8/1/23
P-300	PLUMBING DETAILS AND SCHEDULES	B	7/17/23	8/1/23
P-400	PLUMBING DIAGRAMS	B	7/17/23	7/25/23
M-001	MECHANICAL LEGEND	B	7/17/23	
M-100	MECHANICAL THERMAL ZONES FIRST FL PLAN	B	7/17/23	7/25/23
M-101	MECHANICAL AIR DISTRIBUTION FIRST FL PLAN	B	7/17/23	8/1/23
M-102	MECHANICAL PIPING FIRST FLOOR PLAN	B	7/17/23	
M-103	MECHANICAL ROOF PLAN	B	7/17/23	
M-201	MECHANICAL ENLARGED PLANS	B	7/17/23	8/1/23
M-301	MECHANICAL SECTIONS	B	7/17/23	
M-302	MECHANICAL SECTIONS	B	7/17/23	
M-401	MECHANICAL DETAILS	B	7/17/23	

<i>DRWG NO.</i>	<i>DRAWING NAME</i>	<i>BID PACKS</i>	<i>ISSUE DATE</i>	<i>LATEST REV. DATE</i>
M-402	MECHANICAL DETAILS	B	7/17/23	
M-403	MECHANICAL DETAILS	B	7/17/23	7/25/23
M-404	MECHANICAL DETAILS	B	7/17/23	
M-501	MECHANICAL CONTROLS	B	7/17/23	
M-502	MECHANICAL CONTROLS	B	7/17/23	
M-503	MECHANICAL CONTROLS	B	7/17/23	7/25/23
M-601	MECHANICAL SCHEDULES	B	7/7/23	
M-602	MECHANICAL SCHEDULES	B	7/17/23	7/25/23
E-000	ELECTRICAL LEGEND	B	7/17/23	7/25/23
E-100	ELECTRICAL LIGHTING NEW WORK -FIRST FL	B	7/17/23	8/1/23
E-200	ELECTIRCAL POWER NEW WORK -FIRST FL	B	7/17/23	8/1/23
E-201	ELECTRICAL POWER NEW WORK -ROOF	B	7/17/23	
E-300	ELECTRICAL SYSTEMS WORK -FIRST FLOOR	B	7/17/23	7/25/23
E-400	ELECTIRCAL SITE NEW WORK PLAN	B	7/17/23	8/1/23
E-500	ELECTIRCAL RISER DIAGRAM AND FEEDER SCHEDULES	B	7/17/23	8/1/23
E-501	ELECTIRCAL PANEL SCHEDULES	B	7/17/23	8/1/23
E-502	ELECTRICAL LIGHTING FIXTURE SCHEDULE	B	07/25/23	
E-600	ELECTRICAL DETAILS -LIGHTING	B	7/17/23	
E-601	ELECTRICAL DETAILS -POWER	B	7/17/23	8/1/23
E-602	ELECTRICAL DETAILS -SYSTEMS	B	7/17/23	
T-100	IT LEGEND	B	7/17/23	7/25/23
T-101	IT FLOOR PLAN	B	7/17/23	7/25/23
T-102	IT REFLECTED CEILING PLAN	B	7/17/23	
T-103	IT DETAIL AND ENLARGED SHEET	B	7/17/23	7/25/23
T-104	COMM RISER	B	7/17/23	
T-200	AUDIOVISUAL LEGEND	B	7/17/23	
T-201	AUDIOVISUAL FLOOR PLAN	B	7/17/23	
T-202	AUDIOVISUAL REFLECTED CEILING PLAN	B	7/17/23	
T-202	AUDIOVISUAL ELEVATIONS	B	7/17/23	
T-204	LARGE MEETING ROOM A LINE DIAGRAM	B	7/17/23	
T-205	LARGE MEETING ROOM B LINE DIAGRAM	B	7/17/23	
T-206	AUDIOVISUAL LINE DIAGRAMS	B	7/17/23	
T-300	SECURITY LEGEND	B	7/17/23	
T-301	SECURITY FLOOR PLAN	B	7/17/23	
T-302	SECURITY REFLECTED CEILING PLAN			

NOTE: Bidders shall copy the form given below on their letterheads and use same in submitting their estimates.

B-20 Fire Protection

For Bids Due: _____ To: _____

Name of Bidder: _____

Bidder Address: _____

Contact Name: _____ E-Mail Address: _____

Delaware Business License No.: _____ Taxpayer ID No.: _____

(Other License Nos.): _____

Phone No.: () _____ - _____ Fax No.: () _____ - _____

Dear Sir:

We, _____ (name of bidder) have received the Bidding Documents on the subject project, including the complete Project Manual and the Drawings enumerated in the contract documents, all dated _____. We have also received Addenda Nos. _____ and have included their provision in our bid. We have examined the Bidding Documents and the premises and submit the following bid to perform all required work:

Base Bid: _____ (\$ _____)

SEPARATE PRICE: _____ ADD

For furnishing Performance Bond and Labor and
Material Payment Bond. (\$ _____)

ALTERNATES: N/A

UNIT PRICE N/A

ADDENDA ACKNOWLEDGMENT

The undersigned acknowledges receipt of the following addenda:

ADDENDUM NUMBERDATE OF ADDENDUM

The undersigned has checked all of the above figures, and understands that the Construction Manager will not be responsible for any errors or omissions on the part of the undersigned in preparing this Bid.

In submitting this Bid, it is understood that the right is reserved by the Construction Manager to reject any or all bids and waive all technicalities and informalities in connection therewith. It is agreed that this Bid may not be withdrawn for a period of 60 days from time of opening.

The undersigned declares that the person or persons signing this Bid is/are fully authorized to sign on behalf of the firm listed to all the Bid's conditions and provisions thereof.

It is agreed that no persons or company other than the firm listed below or as otherwise indicated has any interest whatsoever in this Bid or the contract that may be entered into as a result of this Bid and that in all respects the Bid is legal and firm, submitted in good faith without collusion or fraud.

It is agreed that the undersigned has complied and/or will comply with all requirements of local, state and national laws, and that no legal requirements have been or will be violated in making or accepting this Bid, in awarding the contract to him and/or in the prosecution of the work required.

COMPLETION DATE

Should (I)/(We) be awarded the contract, (I)/(We) will complete all the work required in accordance with the Project Schedule.

CANCELLATION OF CONTRACT

With the acceptance of this contract, it is to be understood and agreed that should this project be stopped for any valid reason by the **Owner or Construction Manager**, the cost of all work completed to date and any materials which cannot be returned for credit or have been ordered and cannot be canceled will be paid in full. Subcontractor shall be entitled to a fee applied to the cost of the work and materials completed at the time of the notice of cancellation, in accordance with the General Conditions. All materials purchased from the Sub-subcontractor shall become the property of the Construction Manager and shall be delivered to the Jobsite.

Respectfully submitted,

I am/We are an Individual/a Partnership/a Corporation:

By: _____ Trading as: _____
(Individuals/General Partners/Corporate Name)

State of Incorporation

Business Address: _____

Witness: _____

By: _____

Authorized Signature

(Seal)

Title:

Date:

ATTACHMENTS

Delaware Business License
City of Harrington Contractor's License
(Others as Required by Project Manuals)

END OF SECTION

NOTE: Bidders shall copy the form given below on their letterheads and use same in submitting their estimates.

B-23 Electrical

For Bids Due: _____ To: _____

Name of Bidder: _____

Bidder Address: _____

Contact Name: _____ E-Mail Address: _____

Delaware Business License No.: _____ Taxpayer ID No.: _____

(Other License Nos.): _____

Phone No.: () _____ - _____ Fax No.: () _____ - _____

Dear Sir:

We, _____ (name of bidder) have received the Bidding Documents on the subject project, including the complete Project Manual and the Drawings enumerated in the contract documents, all dated _____. We have also received Addenda Nos. _____ and have included their provision in our bid. We have examined the Bidding Documents and the premises and submit the following bid to perform all required work:

Base Bid: _____ (\$ _____)

SEPARATE PRICE: _____ ADD

For furnishing Performance Bond and Labor and Material Payment Bond. (\$ _____)

ALTERNATES: ***Insert all Alternates. Be sure they are also listed in the Alternate Section of the Specification.***

Alternate No. A1: ***Flagpole***

1. Base Bid: No flagpole, flagpole uplighting, or paved area around flagpole.
2. Add Alternate: Provide flagpole, flagpole uplighting, and paved around flagpole as shown on Architectural, Civil, and Electrical Drawings. Refer to Section 107516 FL – Ground Set Flagpoles for flagpole product information.

Add/Deduct _____ (\$ _____)

Alternate No. A2: ***Extended Parking Lot***

1. Base Bid: Future expanded parking lot as shown on Architectural, Civil and Electrical Drawings is not included. 43 total parking spaces.
2. Add Alternate: Provide additional asphalt, curbing, striping and lighting as shown on Civil and Electrical Drawings. 67 total parking spaces.

Add/Deduct _____ (\$ _____)

Alternate No. B3: ***Harrington Room Features***

1. Base Bid: As shown on Architectural Drawing, A101 and MEP Drawings at Harrington Room, RM119.
2. Add Alternate: Casework, thin brick wall finish, and gas fireplace as shown on Architectural Drawing, A107 and MEP Drawings at Harrington Room, MR119. Refer to Section 116700-Miscellaneous Equipment for gas fireplace product information.

Add/Deduct _____ (\$ _____)

Alternate No. B5: ***Site Sign***

3. Base Bid: No site sign is included. Power and data connections as shown on Electrical and Technology Drawings are included.
4. Add Alternate: Provide site sign as shown on Architectural Drawing A106, Electrical, Technology, and Civil Drawings.

Add/Deduct _____ (\$ _____)

UNIT PRICE ***Insert all Unit Prices requested. Be sure they are also listed in the Unit Price Section of the Specification. SAMPLE UNIT PRICES ARE SHOWN BELOW.***

	<u>BULK</u>		<u>TRENCH</u>	
	<u>Add</u>	<u>Deduct</u>	<u>Add</u>	<u>Deduct</u>
1. Price per cubic yard for excavation and disposal of unsatisfactory material and furnishing. Select fill to include placing, compacting, and finishing. This shall include all trucking costs.	_____	_____	_____	_____

NOTE: The difference in price between Add and Deduct in the above Unit Prices shall not exceed fifteen percent (15%).

The above unit prices shall include labor, materials, bailing, shoring, removal, overhead, profit, insurance, etc. to cover the finished work of the several kinds called for. Changes shall be processed in accordance with Article 7 of the General Conditions.

ADDENDA ACKNOWLEDGMENT

The undersigned acknowledges receipt of the following addenda:

<u>ADDENDUM NUMBER</u>	<u>DATE OF ADDENDUM</u>
_____	_____
_____	_____
_____	_____

The undersigned has checked all of the above figures, and understands that the Construction Manager will not be responsible for any errors or omissions on the part of the undersigned in preparing this Bid.

In submitting this Bid, it is understood that the right is reserved by the Construction Manager to reject any or all bids and waive all technicalities and informalities in connection therewith. It is agreed that this Bid may not be withdrawn for a period of 60 days from time of opening.

The undersigned declares that the person or persons signing this Bid is/are fully authorized to sign on behalf of the firm listed to all the Bid's conditions and provisions thereof.

It is agreed that no persons or company other than the firm listed below or as otherwise indicated has any interest whatsoever in this Bid or the contract that may be entered into as a result of this Bid and that in all respects the Bid is legal and firm, submitted in good faith without collusion or fraud.

It is agreed that the undersigned has complied and/or will comply with all requirements of local, state and national laws, and that no legal requirements have been or will be violated in making or accepting this Bid, in awarding the contract to him and/or in the prosecution of the work required.

COMPLETION DATE

Should (I)/(We) be awarded the contract, (I)/(We) will complete all the work required in accordance with the Project Schedule.

CANCELLATION OF CONTRACT

With the acceptance of this contract, it is to be understood and agreed that should this project be stopped for any valid reason by the **Owner or Construction Manager**, the cost of all work completed to date and any materials which cannot be returned for credit or have been ordered and cannot be canceled will be paid in full. Subcontractor shall be entitled to a fee applied to the cost of the work and materials completed at the time of the notice of cancellation, in accordance with the General Conditions. All materials purchased from the Sub-subcontractor shall become the property of the Construction Manager and shall be delivered to the Jobsite.

Respectfully submitted,

I am/We are an Individual/a Partnership/a Corporation:

By: _____ Trading as: _____
(Individuals/General Partners/Corporate Name)

State of Incorporation

Business Address: _____

Witness: _____ By: _____
Authorized Signature

(Seal)

Title:

Date:

ATTACHMENTS

Delaware Business License
City of Harrington Contractor's License
(Others as Required by Project Manuals)

END OF SECTION

ACORD	CERTIFICATE OF LIABILITY INSURANCE		Date (MM/DD/YYYY)	
<p>THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.</p>				
<p>IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).</p>				
PRODUCER	CONTACT NAME:			
	PHONE (A/C, No, Ext):		FAX (A/C, No):	
	E-MAIL ADDRESS:			
	PRODUCER CUSTOMER ID #:			
	INSURER(S) AFFORDING COVERAGE			NAIC #
INSURED	INSURER A:			
	INSURER B:			
	INSURER C:			
	INSURER D:			

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE			ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
X	GENERAL LIABILITY			X	X	XXXXXXX	XX/XX/XXXX	XX/XX/XXXX	EACH OCCURRENCE		
	X	COMMERCIAL GENERAL LIABILITY							DAMAGE TO RENTED PREMISES (Ea occurrence)		\$1,000,000
		CLAIMS-MADE	X OCCUR						MED EXP (Any one person)		\$100,000
									PERSONAL & ADV INJURY		\$1,000,000
									GENERAL AGGREGATE		\$2,000,000
		GEN'L AGGREGATE LIMIT APPLIES PER:							PRODUCTS - COMP/OP AGG		\$2,000,000
		POLICY	X PROJECT		LOC						
X	AUTOMOBILE LIABILITY			X	X	XXXXXXX	XX/XX/XXXX	XX/XX/XXXX	COMBINED SINGLE LIMIT (Ea accident)		
	X	ANY AUTO							BODILY INJURY (Per person)		\$1,000,000
		ALL OWNED AUTOS							BODILY INJURY (Per accident)		
		SCHEDULED AUTOS							PROPERTY DAMAGE (Per accident)		
	X	HIRED AUTOS									
	X	NON-OWNED AUTOS									
X	X	UMBRELLA LIAB	X OCCUR	X	X	XXXXXXXX	XX/XX/XXXX	XX/XX/XXXX	EACH OCCURRENCE		\$5,000,000
		EXCESS LIAB	CLAIMS-MADE						AGGREGATE		\$5,000,000
		DEDUCTIBLE							EACH OCCURRENCE		
		RETENTION \$							AGGREGATE		
X	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY				X	XXXXXXXX	XX/XX/XXXX	XX/XX/XXXX	X WC STATUTORY LIMITS		
	ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER / MEMBER EXCLUDED? Y / N								E.L. EACH ACCIDENT		\$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below								E.L. DISEASE - EACH EMPLOYEE		\$1,000,000
									E.L. DISEASE - POLICY LIMIT		\$1,000,000
X	POLLUTION LIABILITY (For Hazardous material, site excavation/utility, and building envelope subcontractors)			X	X	XXXXXXXX	XX/XX/XXXX	XX/XX/XXXX	EACH CLAIM		\$2,000,000
	X	CLAIMS MADE FORM							POLICY AGGREGATE		\$2,000,000
X	PROFESSIONAL LIABILITY (for all Design and Professional Service subcontractors)					XXXXXXXX	XX/XX/XXXX	XX/XX/XXXX	EACH CLAIM		\$2,000,000
	X	CLAIMS MADE FORM							POLICY AGGREGATE		\$2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Project: Harrington Public Library

Added Insured: City of Harrington and EDiS Company, as well as any other party as required by contract are listed as additional insureds under all policies (except Workers Compensation and Professional Liability) for all work performed by the named insured. The General Liability and Umbrella/Excess Liability aggregate shall apply on a per-project basis and all policies shall be primary and non-contributing with respects to any insurance maintained by the additional insureds. Umbrella policy follows form as respects to Additional Insured status on the CGL, Employers Liability and Automobile Liability policies. A waiver of subrogation applies in favor of the additional insureds under all policies.

In addition to the above language, please provide the General Liability, On-going and Completed Operations Additional Insured endorsements with all required additional insureds listed in the Schedule box (if not a blanket policy), the Primary and Non-Contributory Endorsements, and the Waiver of Subrogation endorsements for all policies with all required additional insured entities listed (if not a blanket policy). Provide evidence of no EIFS exclusions, if within scope of work.

CERTIFICATE HOLDER

EDiS Company 110 South Popalr Street Wilmington, DE 19801	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE



HARRINGTON PUBLIC LIBRARY BPB PRE-BID SCHEDULE

ID	Task Name	Duration	Start	Finish	Half 1, 2023		Half 2, 2023			Half 1, 2024			Half 2, 2024	
					M	M	J	S	N	J	M	M	J	S
1	HARRINGTON PUBLIC LIBRARY	559 days	Fri 7/15/22	Wed 9/4/24	HARRINGTON PUBLIC LIBRARY									
2	HARRINGTON PUBLIC LIBRARY - PRECONSTRUCTION & DESIGN ACTIVITIES	285 days	Fri 7/15/22	Thu 8/17/23										
81	HARRINGTON PUBLIC LIBRARY - BIDDING & AWARD ACTIVITIES	52 days	Fri 6/23/23	Mon 9/4/23	HARRINGTON PUBLIC LIBRARY - BIDDING & AWARD ACTIVITIES									
99	HARRINGTON PUBLIC LIBRARY - CONSTRUCTION ACTIVITIES	321 days	Wed 6/14/23	Wed 9/4/24	HARRINGTON PUBLIC LIBRARY - CONSTRUCTION ACTIVITIES									
100	Groundbreaking Ceremony	0 days	Wed 6/14/23	Wed 6/14/23	◆ Groundbreaking Ceremony									
101	EDiS Mobilization & Trailer Setup	10 days	Mon 7/24/23	Fri 8/4/23	■ EDiS Mobilization & Trailer Setup									
102	Critical Submittals and Procurement of Materials	30 days	Tue 9/5/23	Mon 10/16/23	■ Critical Submittals and Procurement of Materials									
103	PRELIMINARY SITEWORK	37 days	Mon 9/11/23	Wed 11/1/23	■ PRELIMINARY SITEWORK									
104	Contractors Mobilize	0 days	Mon 9/11/23	Mon 9/11/23	■ Contractors Mobilize									
105	Install SECP Measures & Construction Entrance	7 days	Tue 9/12/23	Wed 9/20/23	■ Install SECP Measures & Construction Entrance									
106	Install Site Utilities (Storm, Sanitary, Water, Roof Leaders)	15 days	Thu 9/21/23	Wed 10/11/23	■ Install Site Utilities (Storm, Sanitary, Water, Roof Leaders)									
107	Prepare Building Pad & Lay Down Area	10 days	Thu 10/12/23	Wed 10/25/23	■ Prepare Building Pad & Lay Down Area									
108	Install Parking Lot Sub-Grade	5 days	Thu 10/26/23	Wed 11/1/23	■ Install Parking Lot Sub-Grade									
109	BUILDING FOUNDATIONS, UG UTILITIES & SLAB-ON-GRADE	25 days	Thu 10/26/23	Wed 11/29/23	BUILDING FOUNDATIONS, UG UTILITIES & SLAB-ON-GRADE									
110	Install Building Concrete Foundations	10 days	Thu 10/26/23	Wed 11/8/23	■ Install Building Concrete Foundations									
111	Install Building Masonry Foundations & Dampproofing	5 days	Thu 11/9/23	Wed 11/15/23	■ Install Building Masonry Foundations & Dampproofing									
112	Install Building UG Utilities	10 days	Thu 11/9/23	Wed 11/22/23	■ Install Building UG Utilities									
113	Place Stone & Slab-On-Grade	5 days	Thu 11/23/23	Wed 11/29/23	■ Place Stone & Slab-On-Grade									
114	BUILDING STRUCTURE & ENVELOPE	65 days	Thu 11/30/23	Wed 2/28/24	BUILDING STRUCTURE & ENVELOPE									
115	Erect Structural Steel & Decking	25 days	Thu 11/30/23	Wed 1/3/24	■ Erect Structural Steel & Decking									
116	Install Perimeter Cold Formed Metal Framing, Sheathing, & Waterproofing	20 days	Thu 12/21/23	Wed 1/17/24	■ Install Perimeter Cold Formed Metal Framing, Sheathing, & Waterproofing									
117	Install Exterior Brick	10 days	Thu 1/18/24	Wed 1/31/24	■ Install Exterior Brick									
118	Install Roofing	15 days	Thu 1/18/24	Wed 2/7/24	■ Install Roofing									
119	Install Exterior Panels	15 days	Thu 1/25/24	Wed 2/14/24	■ Install Exterior Panels									

Harrington Public Library
BPB Pre-Bid Schedule
Date: 02 August 2023

Task
Split



Milestone
Split



Project Summary
Manual Summary



Start-only
Manual Summary



Finish-only
Manual Summary

Progress
Deadline



Progress
Deadline





HARRINGTON PUBLIC LIBRARY BPB PRE-BID SCHEDULE

ID	Task Name	Duration	Start	Finish	Half 1, 2023			Half 2, 2023			Half 1, 2024			Half 2, 2024	
					M	M		S	N		J	M	M	J	S
120	Install Exterior Storefront & Curtainwall & Glazing	15 days	Thu 2/8/24	Wed 2/28/24											
121	INTERIOR FRAMING AND MEP ROUGHINS	50 days	Thu 2/15/24	Wed 4/24/24											
122	Install Interior Metal Framing	10 days	Thu 2/15/24	Wed 2/28/24											
123	Install MEP Rough-Ins	30 days	Thu 2/22/24	Wed 4/3/24											
124	Install & Finish Drywall	20 days	Thu 3/28/24	Wed 4/24/24											
140	FINISH SITEWORK & LANDSCAPING	84 days	Thu 2/29/24	Tue 6/25/24											
143	Rough Grade Around Building	2 days	Thu 2/29/24	Fri 3/1/24											
154	Install Children's and Adult Exterior Gravel Area	1 day	Mon 3/4/24	Mon 3/4/24											
155	Install Fencing	2 days	Tue 3/5/24	Wed 3/6/24											
142	Site Lighting Rough-In	8 days	Thu 2/29/24	Mon 3/11/24											
144	Install Curb	3 days	Tue 3/12/24	Thu 3/14/24											
145	Install Curb (ALTERNATE)	1 day	Fri 3/15/24	Fri 3/15/24											
146	Install Sidewalks & Pads	6 days	Mon 3/18/24	Mon 3/25/24											
147	Brick Pavers & Flag Pole (ALTERNATE)	5 days	Tue 3/26/24	Mon 4/1/24											
148	Prepare Stone Base for Paving	1 day	Tue 4/2/24	Tue 4/2/24											
149	Install Base Paving	1 day	Wed 4/3/24	Wed 4/3/24											
150	Install Base Paving (ALTERNATE)	1 day	Wed 4/3/24	Wed 4/3/24											
151	Final Grade Around Building & Spread Topsoil	1 day	Thu 4/4/24	Thu 4/4/24											
152	Install Seed and Straw/Mulch	1 day	Fri 4/5/24	Fri 4/5/24											
156	Final Site Lighting	5 days	Thu 4/4/24	Wed 4/10/24											
141	DELDOT Little Mastens Road Improvement	20 days	Mon 3/18/24	Fri 4/12/24											
153	Landscaping	5 days	Mon 4/8/24	Fri 4/12/24											
157	Install Final Paving	1 day	Thu 6/20/24	Thu 6/20/24											
158	Install Final Paving (ALTERNATE)	1 day	Fri 6/21/24	Fri 6/21/24											
159	Install Striping, Signage, Parking Bumpers	2 days	Mon 6/24/24	Tue 6/25/24											
125	INTERIOR FINISHES	60 days	Thu 4/25/24	Wed 7/17/24											

Harrington Public Library
BPB Pre-Bid Schedule
Date: 02 August 2023

Task
Split



Milestone
Summary



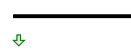
Project Summary
Manual Summary



Start-only
Finish-only



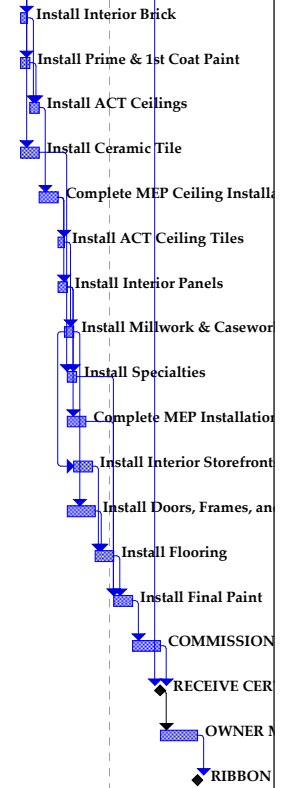
Progress
Deadline





HARRINGTON PUBLIC LIBRARY BPB PRE-BID SCHEDULE

ID	Task Name	Duration	Start	Finish	Half 1, 2023			Half 2, 2023			Half 1, 2024			Half 2, 2024	
					M	M		S	N		J	M	M	J	S
126	Install Interior Brick	3 days	Thu 4/25/24	Mon 4/29/24											
127	Install Prime & 1st Coat Paint	5 days	Thu 4/25/24	Wed 5/1/24											
128	Install ACT Ceilings	5 days	Thu 5/2/24	Wed 5/8/24											
133	Install Ceramic Tile	10 days	Thu 4/25/24	Wed 5/8/24											
129	Complete MEP Ceiling Installations	10 days	Thu 5/9/24	Wed 5/22/24											
130	Install ACT Ceiling Tiles	3 days	Thu 5/23/24	Mon 5/27/24											
132	Install Interior Panels	5 days	Thu 5/23/24	Wed 5/29/24											
131	Install Millwork & Casework	5 days	Tue 5/28/24	Mon 6/3/24											
135	Install Specialties	5 days	Thu 5/30/24	Wed 6/5/24											
139	Complete MEP Installations	10 days	Thu 5/30/24	Wed 6/12/24											
137	Install Interior Storefronts & Glazing	10 days	Tue 6/4/24	Mon 6/17/24											
136	Install Doors, Frames, and Hardware	15 days	Thu 5/30/24	Wed 6/19/24											
134	Install Flooring	10 days	Thu 6/20/24	Wed 7/3/24											
138	Install Final Paint	10 days	Thu 7/4/24	Wed 7/17/24											
160	COMMISSIONING & PUNCHLIST	15 days	Thu 7/18/24	Wed 8/7/24											
161	RECEIVE CERTIFICATE OF OCCUPANCY	0 days	Wed 8/7/24	Wed 8/7/24											
162	OWNER MOVE-IN AND SETUP OF FF&E	20 days	Thu 8/8/24	Wed 9/4/24											
163	RIBBON CUTTING & DEDICATION CEREMONY	0 days	Wed 9/4/24	Wed 9/4/24											



BIM PROJECT EXECUTION PLAN
FOR
HARRINGTON PUBLIC LIBRARY
101 LITTLE MASTENS CORNER ROAD
HARRINGTON, DE 19952
DEVELOPED BY AMP CONSULTING
JULY 31, 2023



Please direct any questions about this Plan to AMP Consulting: Chris Donahue
(cdonahue@ampconsulting.build)



**BIM PROJECT EXECUTION PLAN
FOR
HARRINGTON PUBLIC LIBRARY
DEVELOPED BY AMP CONSULTING
JULY 31, 2023**

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1.0 BIM PROJECT EXECUTION PLAN OVERVIEW

A BIM Project Execution Plan outlines the overall vision along with implementation details for the team to follow throughout the project. To effectively integrate BIM into a project, it is important for the project team to develop a detailed execution plan for BIM implementation. The overarching goal for a BIM Project Execution Plan is to stimulate and direct additional communication and coordination by the team members during all phases of a building project.

The BIM Project Execution Plan for this project will be developed using the BIM Project Execution Plan Template provided in the early design phase of the project and then submitted to the for approval. The BIM Project Execution Plan will work in conjunction with the BIM Addendum; any revisions to the BIM Addendum should be reflected within the project specific BIM Project Execution Plan (BIM Plan).

Purpose:

- To successfully implement Building Information Modeling (BIM) on the project.
- To define uses for BIM on the project (e.g. building systems analysis, cost estimating, and design coordination).
- To describe the process for executing BIM throughout the project lifecycle.
- To ensure Harrington Public Library receives the end product they expect and are able to put it to use in the future.

Goals for BIM Process:

- Sharing of the Revit model between all parties of the design and construction team for review every two weeks after the middle of the Design Development Phase.
- Use of the ICon lab in the middle to end of the Design Development phase and in the beginning of the Construction Documents phase for the purpose of immersing the Harrington Public Library user group in to proposed modelled spaces for review of space and materials.
- Ownership and Use of BIM Model and Database
- The BIM model is the property of Becker Morgan Group and will be shared with the Design-Build team.

This BIM Model is an instrument of service and is considered to be a component of Design and Construction Documents without exception. In addition, each Model Element Author (MEA) contributing to the BIM model(s) and database agrees to provide all project stakeholders and Harrington Public Library (Owner) a non-revocable, exclusive license to utilize any and all intellectual property provided by each MEA contained within this BIM for the sole purpose of completing the design, construction and other uses as stipulated and/or implied by the executed Owner/ Professional Agreement and Owner/Contractor Agreement for this project.

1.1 RECORD MODEL & AS-BUILT MODEL DEVELOPMENT PROCESS

The following process is defined for the Record Model and the As-Built Model. Specific details to be confirmed by the project team:

- Becker Morgan Group is responsible for the initial Design Intent Model. AMP Consulting is responsible for the initial Means & Methods Model.



- Becker Morgan Group is to provide the coordinated Design Intent Model to AMP Consulting to be used for the creation of the Means & Methods Model.
- AMP Consulting will update the Means & Methods Model with all as-built conditions to form the As-Built Model deliverable in Revit.
- Becker Morgan Group will revise the Design Intent Model with all design revisions (architectural, structural, and MEP) to form the Record Model deliverable in Revit.
- AMP Consulting will transition the Revit Model to Revizto 5.
- All 2D Record and As-Built Documents will be produced from their respective models.

2.0 PROJECT INFORMATION

2.1 PROJECT OVERVIEW INFORMATION

Facility Owner	City of Harrington
Project Name	Harrington Public Library
Project Location	Little Mastens Corner Road Harrington, DE 19952
Contract Type/Delivery Method	

2.2 PROJECT NUMBERS

PROJECT INFORMATION	PROJECT NUMBER
HARRINGTON PUBLIC LIBRARY Building Number	
Becker Morgan Group Job No.	
AMP Consulting Job No.	

2.3 PROJECT DESCRIPTION

EDiS Company retained AMP Consulting to provide BIM/VDC services on Harrington Public Library project. AMP Consulting will manage the BIM/VDC work during design and construction. AMP Consulting will provide a full-time in-house BIM manager and BIM Coordination on the project team.

2.4 ADDITIONAL PROJECT INFORMATION

- Operations and Maintenance are under the auspice of Harrington Public Library

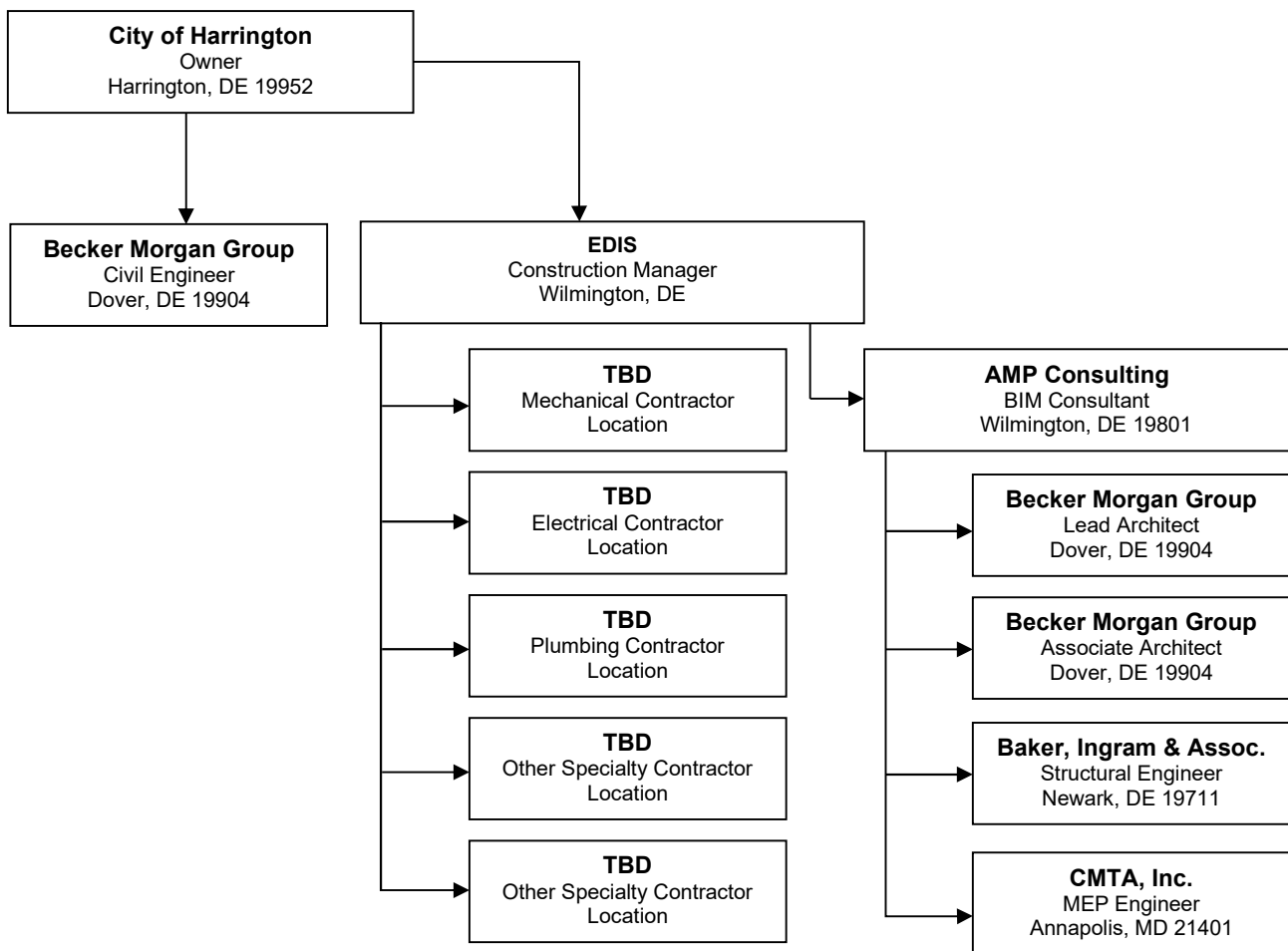
2.5 PROJECT MILESTONES



PROJECT MILESTONE	ESTIMATED START	ESTIMATED COMPLETION	REVISE BIM PLAN	INVOLVED PROJECT STAKEHOLDERS
Construction	9/1/2023	9/1/2025	[NO]	EDiS
Project Closeout	9/1/2023	9/1/2025	N/A	EDiS

3.0 KEY PROJECT CONTACTS

3.1 ORGANIZATION CHART



3.2 HARRINGTON PUBLIC LIBRARY PROJECT STAKEHOLDERS

The following client team staff members are providing leadership for BIM execution on behalf of Harrington Public Library:



ORGANIZATION	ROLE	NAME	EMAIL	PHONE
EDiS Company	Project Manager			
EDiS Company	Program Manager			
AMP Consulting	BIM Director/ Manager			

3.3 DESIGN TEAM PROJECT STAKEHOLDERS

The following consultants are providing professional services for this project. For each firm, key leadership personnel listed includes Principals, Managers, Architect/Engineers, and Designers. BIM Managers/Coordinators are also listed below. This list will be updated as needed as additional team members are assigned to the project. Members of the Design Team include:

ORGANIZATION	ROLE	NAME	EMAIL	PHONE
EDiS Company	Construction Manager	Jonathan Shanus	jshanus@ediscompany.com	302-893-8431
AMP Consulting	BIM Consultant	Christopher Donahue	cdonahue@ediscompany.com	302-893-0492
Becker Morgan Group	Lead Architect			
Baker, Ingram & Associates	Structural Engineer			
CMTA, Inc.	MEP Engineer			
Becker Morgan Group	Civil Engineer			

3.4 CONSTRUCTION TEAM PROJECT STAKEHOLDERS

The following construction specialists are providing professional services for this project during both the design and construction phases. This list will be updated as needed as additional team members are assigned to the project. Members of the Construction Team include:

ORGANIZATION	ROLE	NAME	EMAIL	PHONE
EDiS Company	Construction Manager	Jonathan Shanus	jshanus@ediscompany.com	302-893-8431
AMP Consulting	BIM Consultant	Christopher Donahue	cdonahue@ediscompany.com	302-893-0492



3.5 OWNER CONTRACTED CONSULTANTS

The following construction specialists are providing professional services for this project during the design phase and construction on behalf of EDiS Company as a sole source provider.

ORGANIZATION	ROLE	NAME	EMAIL	PHONE
AMP Consulting	BIM Manager	Christopher Donahue	cdonahue@ediscompany.com	302-893-0492

4.0 ORGANIZATIONAL ROLES AND STAFFING

4.1 BIM MODEL MANAGER

The BIM Model Manager shall have sufficient BIM experience for the size and complexity of the project and shall have relevant proficiency in the proposed BIM authoring and coordination software. The BIM Model Manager shall serve as the main point of contact with EDiS Company/AMP Consulting and the project team for BIM related issues.

During each phase of a Harrington Public Library project, the model manager is required, but not limited to:

- Ensure completeness and accuracy for BIM Plan
- Ensure completeness and accuracy for overall project model
- Coordinate all updates for individual models, specialized models, and databases

4.1.1 RESPONSIBILITIES DURING PLANNING AND DESIGN

- Act as lead contact for BIM related issues with all relevant project stakeholders and manage collaboration between all parties
- Lead the process of BIM Plan development as per requirements of the BIM Addendum
 - Ensure project stakeholder compliance with the EDiS Company/AMP Consulting approved BIM Plan
 - Develop, coordinate, publish, and verify all necessary configurations required for seamless integration of BIM Model(s) and facility data
- Facilitate the transfer of information on the file sharing exchange protocol
 - Assure that the design deliverables specified in the contract are provided in accordance with the required formats



- Determine the project BIM geo-reference point(s) and assures all technical discipline models are properly referenced
- Maintain BIM Model(s) and facility data standards and requirements
- Assure proper BIM derived 2D documents conforms with the Design and Construction Standard
- Coordinate with project team to assure creation of required final BIM deliverables at project turnover
- Coordinate with the for facility management data and file exchange as needed
- Lead meetings with lead BIM technicians and project BIM Team
 - Assemble composite design model for coordination meetings
 - Facilitate use of composite design models in design coordination/clash detections meetings and generate detection reports by the identification and resolution of all hard and soft collisions within the BIM Model(s)
 - Perform design reviews to test design in compliance with functionality and constructability requirements

4.1.2 RESPONSIBILITIES DURING PRECONSTRUCTION AND CONSTRUCTION

- Act as lead contact for BIM related issues with all relevant project stakeholders and manage collaboration between all parties
- Perform model checks and deliver full report on the model/document properly.
- Maintain and revise BIM Plan with additional construction information on an as needed basis
 - Ensure project stakeholder compliance with the EDis Company/AMP Consulting approved BIM Plan
 - Develop, coordinate, publish, and verify all necessary configurations required for seamless integration of BIM Model(s) and facility data during construction
- Coordinate and maintain the transfer of information on the file sharing exchange protocol
 - Coordinate the exchange of BIM model(s) and facility data between the Design Team and construction trades
 - Coordinate any field revisions that have been documented and updated to the Design Model with the Design Team in a timely manner
 - Coordinate with Lead BIM Technicians to integrate 3D fabrication models with the updated design model to ensure compliance with project deliverables
 - Maintain accurate As-Built/Record Model
 - Coordinate with contractor, design team, and commissioning agent to verify facility data before project turnover
 - Coordinate with the for facility management data and file exchange as needed
- Lead meetings with lead BIM technicians and project BIM Team
 - Assemble composite construction model for coordination meetings



- Facilitate use of composite trade models in construction coordination/clash detections meetings and generate detection reports by the identification and resolution of all hard and soft collisions within the BIM Model(s)
- Coordinate construction sequencing and scheduling activities and assure they are integrated with the relevant BIM Model(s) and facility data
- Perform constructability reviews

4.1.3 RESPONSIBILITIES DURING POST CONSTRUCTION

- Meet with facilities management group for review of turnover documents
- Finalize BIM As-Built/Record Model and facility data
- Verify model accuracy and completeness in accordance to Owner Requirements
- Facilitate the transfer of information on the file sharing exchange protocol
- Hand over
- BIM As-Built/Record Model(s) and facility data to for use in operations

4.2 DISCIPLINE LEAD BIM TECHNICIANS

Each major design discipline and subcontractor shall assign an individual to the role of lead BIM Technician for the duration of the project. These individuals shall have the relevant BIM experience required by the complexity of the project. As a minimum, the Lead BIM Technician would have the following responsibilities for their discipline:

- Act as Lead BIM contact for the duration of the project
- Maintain and manage integrity of model, including:
 - Coordinate BIM development, standards, data requirements, etc. as required
 - Lead the technical BIM team in its documentation and analysis efforts
 - Exchange files between other disciplines
 - Upload and maintain models to file exchange server
 - Prepare model for review, as required
- Ensure development and documentation of clash resolution
 - Maintain a continuous interface with the BIM Model Manager
 - Participate in coordination and BIM technology meetings
- Coordinate trade items into the Record Model and/or As-built Model, in accordance with project BIM Plan

5.0 PROJECT BIM OBJECTIVES AND PROJECT BIM USES

5.1 PROJECT BIM GOALS/OBJECTIVES

The following goals have been established for BIM execution associated with this project:



PRIORITY (HIGH/MED/LOW)	GOAL DESCRIPTION
Required	Prepare BIM model to be transferred between project stakeholders to minimize duplication of effort
Required	Conduct conflict resolution analysis during design to eliminate design clashes, resulting in a well-coordinated model prior to construction
Required	Utilize model for 3D Design Reviews to assist with equipment clearances and owner design decisions
Required	Conduct coordination review of key systems with construction manager and specialty trade contractors during construction
Required	Develop an accurate Record Model and As-Built Model to be used for integration into EDiS Company/AMP Consultant's facility management system(s) within the traditional standard of care provisions that govern the design and construction of the project. Record Documents should also include all approved submittals, shop drawings, O&M Manuals, building control drawings, construction photos, inspection reports, and commissioning data
Required	Integrate project data into for use in Asset Management after turnover and specific to campus asset management plan
Required	Prepare accurate design documents and construction documents derived from the model to establish basis of design within the traditional standard of care provisions that govern the design of the project
Required	Implement a process in which BIM software utilizes the model and energy attributes to determine the most effective engineering methods based on design specifications
High	Enhance Design Consolidation/ Coordination
Medium	Prepare accurate design model for piping, ductwork, etc. to Facilitate Prefabrication Efforts
Low	Field BIM to provide more immediately available accurate information on changes during construction
Low	Provide Interactive Operations and Maintenance Reference (Asset Management)

5.2 PROJECT BIM USES

A BIM Use is defined as a task or procedure on a project which can benefit from the application and integration of BIM technologies and add value to the overall project.

BIM USE CLASSIFICATION	DEFINITION
Mandatory	Required on all HARRINGTON PUBLIC LIBRARY construction projects using the BIM Project Execution Plan
Significant Effort	Project team should make serious attempt to pursue BIM Use. Any reasons for noncompliance must be submitted to HARRINGTON PUBLIC LIBRARY for



approval

The following BIM Uses marked **Mandatory** are the minimum requirement for BIM use during all phases of the project, as well as recommended effort for other BIM Uses. Additional uses specific to the project may be added using the table below:

5.2.1 BIM USES DURING PLANNING THROUGH 8.2.4

BIM USE	OBJECTIVE	RESPONSIBLE PARTY	EFFORT
Energy Analysis	Conduct energy assessments for building design, inspect building energy standard compatibility, and optimize proposed design to reduce facility lifecycle costs	BECKER MORGAN GROUP	Mandatory
Existing Conditions Modeling	Develop a 3D model of the existing conditions for a site, facilities on a site, or a specific area within an existing facility		Not Pursued
Site Analysis	Evaluate site to determine if site meets the required criteria according to project requirements, technical factors and/or financial factors	BECKER MORGAN GROUP, Seamon Whiteside	Significant Effort
Programming	Analyze spatial program and requirements and accurately assess design performance in regard to space standards and regulations	BECKER MORGAN GROUP	Minimal Effort
Massing	Analyze exterior massing of the building as it relates to the site and surroundings.	BECKER MORGAN GROUP	Significant Effort

5.2.2 BIM USES DURING DESIGN

BIM USE	OBJECTIVE	RESPONSIBLE PARTY	EFFORT
Design Intent Model Development	Develop model based on criteria that is important to the translation of the building's design	EDiS Company	Mandatory
Design Reviews	Review design development / progress and require feedback based on design	EDiS Company	Mandatory
3D Design Coordination	Determine and resolve major system design conflicts prior to construction	EDiS Company	Mandatory



Energy Analysis	Analyze model based on energy design specifications (Trane Trace 700)	EDiS Company	Mandatory
Model Auditing	Organize and assess asset attribute data into model	EDiS Company	Mandatory
Preconstruction Coordination	Coordinate constructability issues with Contractor	AMP Consulting	Significant Effort
Structural Analysis	Analyze model based on structural specifications	AMP Consulting	Significant Effort
Mechanical Analysis	Analyze mechanical systems based on design specifications	AMP Consulting	Significant Effort
Lighting Analysis	Analyze lighting systems based on design specifications	AMP Consulting	Significant Effort
LEED Evaluation	Organize information for USGBC	AMP Consulting	Minimal Effort
Cost Estimation & Quantity Takeoff	Supplement model with progress drawings to track quantities and counts	AMP Consulting	Minimal Effort
Code Evaluation	Streamline code review		Not Pursued

5.2.3 BIM USES DURING CONSTRUCTION

BIM USE	OBJECTIVE	RESPONSIBLE PARTY	EFFORT
Means & Methods Model Development	Develop model based on criteria that is important to the translation of the building's construction	AMP Consulting	Mandatory
Constructability Reviews	Evaluate construction feasibility	AMP Consulting	Mandatory
3D Construction Coordination	Determine and eliminate system conflicts prior to installation	AMP Consulting	Mandatory
Model Auditing	Verify asset attribute data into model	AMP Consulting	Mandatory
Site Utilization Planning	Visually depict site conditions	AMP Consulting	Significant Effort
Cost Estimation	Trend quantities	AMP Consulting	Minimal Effort
Digital Fabrication	Prefabricate objects (CNC, Preassembly, modularization)	AMP Consulting	Minimal Effort
3D Control and Planning	Use model to layout and install equipment, track production		Not Pursued
Construction System Design	Plan and design temporary components and safety systems		Not Pursued



5.2.4 BIM USES PRIOR TO PROJECT TURNOVER

BIM USE	OBJECTIVE	RESPONSIBLE PARTY	EFFORT
Record Model	Compare design intent to installed conditions	AMP Consulting	Mandatory
As-Built Model	Capture installed conditions during construction	AMP Consulting	Mandatory
Continuous Commissioning	Commission facility based off of end-user requirements	AMP Consulting	Significant Effort
Asset Management	Track manufacturer, commissioning, and maintenance records	AMP Consulting	Significant Effort
Space Management and Tracking	Identify space use and track use throughout management of facility and movable assets		Not Pursued
BAS System Integration	Integrate model with existing Building Automation System		Not Pursued

6.0 DESIGNING THE BIM EXECUTION PROCESS

6.1 MAPPING THE BIM EXECUTION PROCESS

A process diagram for the overall use of BIM on the project has been developed for the project. The attached diagram summarizes the workflow BIM uses and their associated information exchanges for the project. The BIM Execution Process Diagram for this project can be found in **Attachment 1** of this document.

6.2 DEVELOPING INFORMATION EXCHANGES

The project team should document the information exchanges created as part of the planning process when creating the BIM Plan. The level of development (LOD) for each model element is based on the model content criteria established by the AIA Document E202, Building Information Modeling protocol Exhibit. The LOD will assist in determining the level of involvement for each project stakeholder from project conception through project turnover. The LOD Matrix for the project is located in **AIA Document G204-2022 Model Element Table**.

6.3 BIM INFORMATION EXCHANGE METHODOLOGY

The following section lists the typical procedures for information exchanges, model sharing, and coordination throughout the project. Please validate accordingly for the project.



6.3.1 COORDINATION AND CONFLICT RESOLUTION

This Section shall be utilized in conjunction with the BIM Coordination Protocol. If conflicts exist between the two documents, this document shall govern.

When conflicts are discovered in the model, regardless of project phase or LOD, the discovering party shall promptly notify the Model Element Author. Upon notification, the Model Element Author shall act promptly to mitigate the conflict. All project stakeholders and responsible parties must post their models to the designated shared server on a weekly basis as specified. Before the model(s) are shared and/or transferred, the model should be audited to conform to the following standards:

- Begin coordination process as early as possible
 - Designate the Project Model Manager
 - Designate BIM contact for each project stakeholder
 - Specify LOD for all Model Attributes
 - Create file storage and transfer process (workspace, model naming convention, model protocol)
 - Verify file type, compatibility, and needs
- Create schedule of expectations for model delivery
 - Deadlines for each project stakeholder based on level, area, phase
 - Set file upload dates (weekly) with time for interdisciplinary coordination
- Validate Model
 - Apply construction means and methods to architectural and structural model
 - Ensure model integrity and accuracy
- Establish conceptual placement of components within the architectural space
- Determine coordination hierarchy, for example:
 - Architectural
 - Structural
 - Equipment
 - HVAC Duct
 - Wet Mechanical
 - Gravity Plumbing
 - MEPF Risers
 - HVAC Distribution
 - Plumbing Distribution
 - Electrical Distribution
 - Fire Protection Distribution
- Clash Detection process
 - Project stakeholders access each other's models to work on specific level, area, phase
 - Clash resolution to be worked out among project stakeholders
 - BIM Model Manager will check models for interference and conflicts



- BIM Model Manager will distribute composite model in .nwd format showing unresolved clashes and clash report document for project stakeholder review and resolution before next coordination meeting
- Weekly coordination meetings will take place to address unresolved issues with the composite model
- BIM Model Manager will distribute meeting minutes and resolution decisions after each meeting to project team
- Process begins again to address the next level, area, phase
- Clash-free model is then distributed to all parties and signed off as per project phase
- All clash detection is in Revizto

6.3.2 ADDITIONAL BIM METHODOLOGY

- Design Model Reviews Bi-monthly: models will be sent via Dropbox to AMP Consulting for review.

7.0 FACILITY ATTRIBUTE DATA REQUIREMENTS – NOT APPLICABLE

7.1 ASSET ATTRIBUTE INFORMATION

7.2 ASSET DATABASE REQUIREMENTS

Refer to Section 10.4: Database Structure for the organization and structure of asset database.

8.0 COLLABORATION PROCEDURES

8.1 COLLABORATION STRATEGY OVERVIEW

Our team will collaborate through the use of BIM from the Design Development stage through opening day. We will share the model between the Designers, Construction Managers, and Subcontractors, to work out both pre-construction and field items. The model will be shared with AMP Consulting – EDiS during design at two week intervals to ensure they have the most current information. All meetings for the project will be held on campus at Harrington Public Library and our BIM meetings will be organized as follows:

A BIM requirements kickoff meeting will be held during the early planning stages in order to help the Owner (, Housing, other interested campus parties), Construction Manager, Design Assist Subcontractors, and Designers understand the other parties' needs, processes, and the abilities of their hardware and software so the final deliverable will be suitable for Harrington Public Library's needs.

Design Coordination Sessions and Construction over-the-Shoulder Progress reviews will be held throughout all phases of Design and Construction. Participants may include: Owner (individuals as determined by Harrington Public Library), Construction Manager, Design Assist Subcontractors, and Designers.



Design Build Team Construction Coordination reviews and Field Change Design Discussions and on site will be held frequently during construction through the use of Revit, Navisworks, and Blue Beam.

8.2 MEETING PROCEDURES

MEETING TYPE	PROJECT STAGE	FREQUENCY	PARTICIPANTS	LOCATION
BIM Requirements Kick-off	Planning	Once	Senior Management, BIM Management Staff	Virtual
BIM Plan Review	ALL	Monthly	Senior Management, BIM Management Staff, Harrington Public Library, BIM Coordinator	Virtual
3D Design Coordination	Design Documents Construction Documents	Bi-weekly	Design Team	Virtual
Mechanical Space Review	Design Documents Construction Documents	TBD	Harrington Public Library, Work Control Center, Design Team, Construction Team,	Virtual
Model Commissioning Checks	Construction Documents, 75% Submittal Approval	TBD	BIM Management Staff	Virtual
3D Construction Coordination	Construction	Weekly	Construction Team	Virtual

8.3 MODEL DELIVERY/ EXCHANGE SCHEDULE FOR SUBMISSION AND APPROVAL

INFORMATION EXCHANGE	FILE SENDER	FILE RECEIVER	FREQUENCY	START DATE	MODEL FILE	MODEL SOFTWARE	Native File Type	File EXCHANGE TYPE
Design Authoring – 3D Design Coordination	Becker Morgan Group	Becker Morgan Group	Sharing			Revit 2023	rvt	Dropbox
	Becker Morgan Group	Becker Morgan Group	Sharing			Revit 2023	rvt	Dropbox
	Becker Morgan Group	AMP Consulting	2 weeks			Revit 2023	rvt	Dropbox
Design	Becker Morgan Group	AMP Consulting	As needed			Revit 2023	rvt	Dropbox



Prime Contractors – 3D Construction Coordination	AMP Consulting	Becker Morgan Group	1x/ month	Revit 2023	rvt	Dropbox
	AMP Consulting	Becker Morgan Group	1x/ month	Revit 2023	rvt	Dropbox
Additional Software						

8.4 FILE TRANSFER PROTOCOL

An electronic workspace of File Transfer Protocol (FTP) will be established for the purpose of efficient and timely transfer of model and database files. This workspace will provide a collaborative location where the current contract CAD/Revit files, coordination files, and fully coordinated submittal files will reside. Each BIM coordination team member stores and obtains data from this location. Project team members are to upload updated copies of their files, provide notification, and to make collaboration comments and annotations as often as necessary to maintain project schedule.

8.5 ELECTRONIC COMMUNICATION PROCEDURES

“hyperlink to model folder”

Contact info for access:

Chris Donahue

AMP Consulting, BIM Manager

302-421-2963

cdonahue@ampconsulting.build

The BIM Model Manager will manage and maintain all user accounts and model access rights that include the creation, deletion, and modification of elements. All project participants will be given view and download rights to the federated model files. The BIM Model Manager will apply access controls to users so that only authorized users of the model can add the files for their respective component model(s). The following table consists of the model and data access rights for the project:

MODEL ACCESS RIGHTS									
FTP FILE BREAKDOWN STRUCTURE	Project Stakeholders								
	O	A/E	S	M	P	E	FP	C	SC
Virtual Construction									
BIM Requirements	D	M	D	D	D	D	D	M	D



BIM Execution Plan	M	M	D	D	D	D	D	M	D
Coordination									
Coordination Key Plans									
Subfolders per Design Aspect	D	D	D	D	D	D	D	M	D
Architect CAD Files	D	M	D	D	D	D	D	M	D
Coordination Background Data Sets	D	V	D	D	D	D	D	M	D
Revizto/Origin	D	M	D	D	D	D	D	M	D
Object Enablers	D	M	M	M	M	M	M	M	M
Component Models									
Subfolders per Design Aspect	D	D/M	D/M	D/M	D/M	D/M	D/M	D/M	D/M
Federated Models/Interference Reports									
Subfolders per Level/Area/Zone	D	D	D	D	D	D	D	M	D
Signed-off Coordination Component Models									
Subfolders per Level/Area/Zone	D	D	V	V	V	V	V	M	V
Asset Database	M	M	V	M	M	M	V	M	M
Construction Submittals	D	D	D	D	D	D	D	M	M
Project Stakeholders: O = Owner, A/E = Architect/Engineer, C = Contractor, SC = Specialty Contractor Permissions: V = View, M = Modify, D = Download									

8.6 RIGHT OF RELIANCE

The BIM Model produced by the project stakeholders associated with the Design Team will serve as the basis of design and is considered a **Design Intent Model** only. The model prepared by the Design Team will be used by AMP Consulting/ EDiS to prepare a **Means and Methods Model**. This Right of Reliance pertains to all models and applications associated with the model and associated applications.

The Construction Team may rely on the accuracy of the model(s) prepared by the Design Team in accordance with traditional Standard of Care provisions that apply and govern the design and construction of comparable buildings in two (2) - dimensional design formats and methods.

Conversely, the Design Team may rely on the accuracy of the model(s) prepared by the Construction Team in accordance with traditional Standard of Care provisions that apply and govern the preparation of shop drawings, fabrication drawings, sequencing and other instruments used to convey the means and methods under the control of AMP Consulting, its subcontractors, consultants, and other agents working on this project.



As mutually agreed by all parties including Becker Morgan Group, AMP Consulting/ EDiS and Owner, nothing shall be construed by the content and/or preparation of the associated model(s) as a warranty or guarantee of accuracy and/or completeness by the Design Team. Standard and traditional procedures for design, documentation, means and methods, shop drawing submittals, verification by the contractor, requests for information in question, etc. **shall apply** to the design, construction and construction administration of the project.

The construction manager, contractors and subcontractors shall be solely responsible for means and methods and the execution of the Design Intent Model through the execution, preparation and management of delegated design, the Means and Methods Model(s), fabrication, installation and construction.

9.0 TECHNOLOGICAL INFRASTRUCTURE

9.1 COMPUTERS / HARDWARE

Recommended Hardware: Quad Core Processor / 8-12 GB RAM / Windows 7

9.2 SOFTWARE

9.2.1 APPLICABLE SOFTWARE APPLICATIONS FOR DESIGN

The following software applications will be utilized by the Team for this project during design:

SOFTWARE	VERSION	PROJECT STAKE HOLDER	TASK TYPE
Revizto	5	AMP Consulting	Design Model/ Record Model
AutoCad	14	Seamon Whiteside	Design/ Drafting
Bluebeam	2014	BECKER MORGAN GROUP	Design/ Presentations
RAM Structural System	14.06.01.00	BECKER MORGAN GROUP	Design Calc

9.2.2 APPLICABLE SOFTWARE APPLICATIONS FOR CONSTRUCTION

The following software applications will be utilized by the team for this project during construction:

SOFTWARE	VERSION	PROJECT STAKE HOLDER	TASK TYPE
Revit	2023	AMP Consulting and Subcontractors	As-Built Model
Revit	2023	Becker Morgan Group	Design Model/ Record Model/ Construction Bulletins
Sketchup	8	Becker Morgan Group	Design



Adobe Creative Cloud	2014	Becker Morgan Group	Design/ Presentations
Navisworks Manage	2023	Becker Morgan Group/Amp Consulting/ Subcontractors	Coordination Review
Revizto	5	Supplied by AMP Consulting	

A variety of software systems will be used by subcontractors, fabricators, and third parties to prepare delegated design elements. In the event these design elements are more accurate than the Construction Documents, the geometric information should be converted into Revit format.

****Revizto license** Subcontractors to allow \$1,200 for Revizto license.**

10.0 MODEL AND DATABASE STRUCTURE

10.1 PROJECT NAMING CONVENTIONS

10.1.1 FILE NAMING CONVENTIONS

Files should be named according to the following conventions:

TBD

10.1.2 ROOM NUMBERING CONVENTIONS

Please refer to Design and Construction Standards for the room numbering convention used for all locations, on both new construction and renovation projects. This system provides a consistent method for identifying and managing building space and shall be adhered to unless approval for deviation is received from the Signage Administrator. The room numbering convention is as follows:

- (x)(x)(x) = x numeric identify floor and room number
- (x)(x)(x)(A) = alpha suffix identifies room subdivisions
- (J)(x)(x)(x) = alpha prefix identifies a unique room space (J – Janitorial Room)

Room Number Coordination and Validation drawing(s) and report deliverables are noted in [Section 12.1: Design Deliverable Requirements](#) and will be reviewed by Harrington Public Library at project milestones.

10.2 MODEL STRUCTURE

The success of a BIM enabled project delivery process is highly dependent upon the level at which the entire project team can communicate and work collaboratively for the duration of the project.

- For buildings with a large footprint or multiple floors, the project team may split the model into several zones (or floors) with the corresponding trades
- All trades will be modeled at the correct elevation



- All elements of the building must be represented in only one file and should be modeled by their specific trade. (For example, the architectural model provided for 3D Coordination should not include any of the structural elements contained in the structural model. Lights should be modeled by the electrical engineer, not the architect)
- All 3D model files must strip extraneous 2D and/or 3D elements from the model before submission for clash detection
- The architectural ceilings should contain information for openings for lights, registers, etc. as required by design. (For example, lights are to be centered on a grid with proper spacing)
- All models should include separate 3D representations of required clearances and/or access requirements for equipment access, light clearances, overhead cable tray access, etc. These clearance/access models should be in a separate layer(s)/level(s) per each trade and labeled as such

10.2.1 MEASUREMENT AND COORDINATE SYSTEM

X-reference point will be 0, 0, 0.

10.2.2 MODEL ELEMENT REQUIREMENTS BY DESIGN TEAM DISCIPLINE

The following section lists the typical BIM model and related elements by discipline and/or exclusions. Please refer to the LOD Matrix for responsible party, project phase, and level of detail information.

Every discipline is required to provide all relevant schedules, reports, and intelligent attribute data defined by the project scope and BIM Plan.

SITE/CIVIL MODEL

Model(s) shall contain all site-related features of the project which are not integral with the building envelope:

- Utilities
- Topography
- Water Quality Ponds
- Storm water Detention and Filtration Structures
- Planting Materials
- Paving
- Site stairs, ramps, and railings
- Retaining walls
- Site furnishings
- Erosion Control (Temporary and Permanent)

ARCHITECTURAL MODEL

Model(s) shall contain all architectural features for a building and site-related features extending 5'-0" beyond the facility footprint:

- Exterior wall systems



- Interior wall systems
- Fire rated walls
- Architectural floor slabs
- Roofing system
- Fire extinguishers and fixed equipment
- Reflected ceiling plans
- Core and vertical systems (including elevators, stairs, escalators, and railings)
- Doors (including frames)
- Glazing (including windows, interior glazing, curtain walls, and storefronts)
- Millwork and Casework
- Furniture
- Finishes
- Toilet Partitions

STRUCTURAL MODEL

Model(s) shall contain all structural features for a building:

- Footings, concrete piers, foundation walls (including areaways), and pits
- Structural slab-on-grade (as solid mass)
- Elevated floor slabs, CMU bearing walls, CMU shear walls
- All structural steel members in their true shape and dimensions
- Exclusions: nuts and bolts
- Column Gridlines
- Primary floor openings (stairs, elevators, mechanical shafts)
- Primary bearing wall openings
- Elevator hoist

MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION MODEL(S)

Model(s) shall contain all MEP features for a building:

Mechanical Model:

- Major mechanical equipment (including energy recovery units, pumps, boilers, chillers, heat exchangers, and control panels)
- Major mechanical equipment requiring service clearance will be model with required clearance indicated.
- Mechanical ductwork and associated components (including flex duct, supply diffusers, and return grilles)
- Ductwork will be modeled using their inside dimensions and will include insulation if applicable and as required for coordination



- Mechanical piping and associated components (including flow meters and isolation valves, check valves and control valves for mains and branch mains)
- Piping will be modeled using their outside dimensions and will include insulation if applicable and as required for coordination

Electrical Model:

- Electrical conduit 1 1/4" and larger (or two or more regardless of size)
- Telecommunication racks and under floor tray(s)
- Safety and security systems
- Electrical equipment including specialty systems and pads
- Power feeds to equipment, transformers, panels, gear, junction boxes, cable trays, distribution boxes, etc
- Hangers and structural supports, unless they do not influence the coordination process of other trades
- Electrical light fixtures and ceiling devices
- Electrical panels and panel schedules
- Clearance requirements for equipment access, service space requirements, gauge reading, valve clearances, panel access, and other operation clearances

Plumbing Model:

- Domestic water piping
- Sanitary waste and vent piping
- Storm drainage piping
- Valves and meters
- Drains, cleanouts, and interceptors
- Plumbing equipment
- Plumbing fixtures
- Vents, valves, meters, cleanouts
- Plumbing equipment and fixtures

Fire Protection Model:

- Fire protection mains/standpipes
- Clearance requirements for equipment access, service space requirements, gauge reading, valve clearances, panel access, and other operation clearances

11.0 QUALITY CONTROL PROCEDURES

11.1 OVERALL STRATEGY FOR QUALITY CONTROL

The purpose of this process is to ensure project teams are using best practices in the development and file exchange of models and facility data. This is an ongoing process, which is to be conducted by the project team



and validated by the Project manager at both project milestones and at random intervals to ensure that each model is being constructed in accordance with the BIM Standards and is suitably modeled for its intended use. The goal is to ensure that there are no unresolved issues during construction or any significant loss of data upon transfer of as-built models and record documents at facility turnover.

Each BIM Manager will be responsible for running quality control checks on their model(s) on a consistent and frequent basis. For issues involving other disciplines, the issue shall be made known to the corresponding BIM Manager.

We will perform Navisworks checks periodically to ensure fewer clashes in the model where two building components are overlapping. As we work, our technicians will ensure that the BIM Standard have been followed and that there are no unintended model components present. Our team will validate that the Project Facility Data set is as requested by the Owner is followed. One member of the project team will oversee all of the asset data and export it to a spreadsheet for verification that it has no undefined, incorrectly defined or duplicated elements.

11.2 QUALITY CONTROL CHECKS

CHECKS	DEFINITION	RESPONSIBLE PARTY	RECOMMENDED PROJECT MILESTONES
Standards	Ensure the BIM Standards and Guidelines have been followed	AMP Consulting	Construction Documents Project Closeout
Visual	Ensure there are no unintended model components and the design intent has been followed	AMP Consulting/ Becker Morgan Group	Design Development Construction Documents 50% Construction Project Closeout
Model Integrity	Ensure that the Facility Data set has no undefined, incorrectly defined, or duplicated elements; ensure a reporting process and corrective action plans have been developed for noncompliant elements	AMP Consulting/ Becker Morgan Group	Construction Documents 50% Construction Project Closeout
Model Commissioning	Provide report verifying model and database compliance with defined quality control procedures for component LOD and stakeholder information	AMP Consulting	Construction Documents 50% Construction Project Closeout

11.3 QUALITY CONTROL PROCEDURES

BIM Managers to define an appropriate quality control procedure for the project. The following is an example of a quality control procedure and must be validated for the project:

- Review random 10% of documented information



- If percent error is less than 3%, document reasons for error and revise throughout remaining model
- If percent error is between 3-5%, review additional 15% of randomly selected documented information.
- If percent error is greater than 3% after 25% review, project team to revise and resubmit information, as to not delay downstream user progress
- If percent error is less than 3% after 25% review, document reasons for error and revise throughout remaining model
- If percent error is greater than 5%, project team is to revise and resubmit information, as to not delay downstream user progress

11.4 MODEL ACCURACY AND TOLERANCES

Model(s) should be developed as accurate as possible. Dimension tolerances should be set at 1/16" to facilitate the accuracy of the model.

12.0 PROJECT DELIVERABLES

The BIM deliverables indicated below are required to be submitted with the standard phase deliverables for each project phase. The BIM Plan should establish the responsible parties and corresponding tasks for each deliverable. The level of development for each BIM deliverable should be, at a minimum, sufficient to fulfill the 2D document submission requirement.

12.1 DESIGN DELIVERABLE REQUIREMENTS

BIM DELIVERABLE	RESPONSIBLE PARTY	DUE DATE	FORMAT	NOTES
BIM Project Execution Plan	EDiS/AMP Consulting		.pdf	
Design Intent Model(s)	Becker Morgan Group	Design Development	.rvt .nwd native	See information Exchange Worksheet to ensure that the proper information is contained in the model
Design Drawings: Design Development	Becker Morgan Group	Design Development	.pdf	Documents to be printed directly from model. Documents to be stamped and signed in traditional practice to comply with local permitting requests
Room Number Coordination & Validation (Design Development)	Becker Morgan Group	Design Development	.pdf	Document and schedule to be printed directly from model for review.



Design Drawings: Construction Documents	Becker Morgan Group	Construction Documents	.pdf	Documents to be printed directly from model. Documents to be stamped and signed in traditional practice to comply with local permitting requests
Room Number Coordination & Validation (Construction Documents)	Becker Morgan Group	Construction Documents	.pdf	Document and schedule to be printed directly from model for review.
Interference Check Reports	EDiS/AMP Consulting	Construction Documents	.xls	
Model Attribute Report	AMP Consulting	Post Construction Documents	.xls	
Harrington Public Library Facility Attribute Data Compliance Report	AMP Consulting	Post Construction Documents	.pdf .xls	

12.2 CONSTRUCTION DELIVERABLE REQUIREMENTS

BIM DELIVERABLE	RESPONSIBLE PARTY	DUE DATE	FORMAT	NOTES
BIM Project Execution Plan	AMP Consulting	TBD	.pdf	
Interim Means and Methods Model(s) per Discipline	AMP Consulting		.rvt .nwd native	See information Exchange Worksheet to ensure that the proper information is contained in the model
Interference Check Reports	AMP Consulting/ Becker Morgan Group		.xls	
Construction Submittals	AMP Consulting		.pdf	
Model Attribute Report	AMP Consulting		.pdf	
AMP Consulting Facility Attribute Data Compliance Report	AMP Consulting		.pdf .xls	

12.3 PROJECT CLOSEOUT DELIEVERABLE REQUIREMENTS



BIM DELIVERABLE	RESPONSIBLE PARTY	DUE DATE	FORMAT	NOTES
Record Model	Becker Morgan Group	30-60 After Completion	.rvt .nwd native	See information Exchange Worksheet to ensure that the proper information is contained in the model
As-Built Model	AMP Consulting	30-60 After Completion	.rvt .nwd native	See information Exchange Worksheet to ensure that the proper information is contained in the model
Record Drawings	Becker Morgan Group	30-60 After Completion	.pdf	Documents to be printed directly from model. Documents to be stamped and signed in traditional practice to comply with local permitting requests
Harrington Public Library Facility Attribute Database	AMP Consulting	30-60 After Completion	.pdf .xls	

13.0 ATTACHMENTS

1. AIA Document G203-2022 BIM Execution Plan
2. AIA Document G204-2022 Model Element Table
3. Harrington Public Library Scope Participation List
4. Exhibit "I" – BIM Coordination

ATTACHMENT 1: BIM MODEL LOD MATRIX

The project team should document the information exchanges created as part of the planning process when creating the BIM Plan. The following table describes the Model Element Author (MEA) referenced by the BIM

Model LOD Matrix:

MODEL ELEMENT AUTHOR		
ACRONYM	ORGANIZATION	ROLE
City	City of Harrington	Owner
HPL	Harrington Public Library	Tenant
BMG	Becker Morgan Group	Design Team
AMP	AMP Consulting	BIM



CMTA	CMTA	Engineer
BIA	Baker, Ingram & Associates	Engineer

The level of development (LOD) for each model element is based on the model content criteria established by the AIA Document E202, Building Information Modeling protocol Exhibit. The LOD will assist in determining the level of involvement for each project stakeholder from project conception through project turnover. The content for the LOD is described as follows:

Level of Development	Description
LOD 100 Schematic Design	The LOD 100 model consists of overall building massing designed to perform whole building type analysis including building orientation, square foot costs. LOD 100 also pertains to 2D representation of elements as required by the 2D Construction Documents which may include drawings, narratives, and hand-built models.
LOD 200 Design Development	The LOD 200 model consists of generalized systems including approximate quantities, sizes, shapes, location, and orientation. The LOD 200 model(s) are used for analysis of defined systems and general performance objectives. LOD 200 model(s) include attributes and parameters defined by the owner in the Owner Requirements document and BIM Plan.
LOD 300/350 Construction Documentation	Model will include elements equivalent to traditional construction documents and shop drawings. LOD 300/350 models are well suited for estimating as well construction coordination for clash detection, scheduling, and visualization purposes. LOD 300/350 model(s) include attributes and parameters defined by the owner in the Owner Requirements document and BIM Plan.
LOD 400 Construction Administration/ Shop Drawings	Model elements are modeled as specific assemblies which are accurate in terms of quantity, size, shape, location, and orientation. LOD 400 model(s) are virtual representations of the proposed elements and considered to be suitable for construction, fabrication, and assembly. This LOD is most likely used by specialty trade contractors and fabricators to build and fabricate project components including MEP systems.
LOD 500 Project Completion/ Record Drawings/ As-Built Conditions	Model elements represent the project as it has been constructed, including as-built conditions. The model is configured to be the central data storage for integration into the building maintenance and operations system(s). LOD 500 Model(s) will include completed parameters and attributes specified in the Owner Requirements document and BIM Plan. At the completion of construction, the BIM model(s) will be finalized, linked, and cross referenced.
LOD 510, 520, 530, 540	Model elements represent the project as it has been constructed, including as-built conditions. LOD 510, LOD 520, LOD 530, and LOD 540 models will contain LOD 100, LOD 200, LOD 300, LOD 400 facility and geometry data respectively and will be configured to contain the Operations and Maintenance manuals, warranty information, submittal information, and/or any other documents as applicable or required.



LOD 550 Owner Reserved	Owner reserved, LOD 550 model elements will not be generated during planning, design, or construction.
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Exhibit 'I'	Contractors LOD Requirement
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The BIM LOD Matrix worksheet shall be completed by the project team during BIM Plan development.



EXHIBIT 'I'

BIM COORDINATION

1.0 CONTRACTOR 3-D MODEL RESPONSIBILITY

The purpose of a three-dimensional model is to aid in project review development. Contractor and its sub-contractors, as part of the Harrington Public Library project, shall hold all responsibility to adhere to AIA G202-2013 Project Building Information Modeling Protocol Form Matrix while creating their BIM model respectively. This BIM model shall reflect the two-dimensional contract drawings provided in bidding package, RFI, and ASI. The Contractor's referenced and shared three-dimensional model is only utilized as a visual aid to begin per matrix LOD required by Contractor.

- 1.01 Architect and their consultants will Furnish Contractor one set of Revit 2023 Building Information Modeling files (BIM) of Drawing for use in preparing coordination digital data files.
 - a. Architect makes no representations as to the accuracy or completeness of digital data files as they relate to drawings.
 - b. Digital data software program: Drawings are available in Revit 2023 digital data software working on the Windows operating system. Sheet views will be deleted to protect the architect and consultants. Full model will be available for coordination.
 - c. Contractor shall execute a data licensing agreement in the form of the agreement included in the project manual.
 - d. The Contractor and its prime contractors are responsible to execute all licensing for requested software to coordinate the project.
- 1.02 BIM File Incorporation: Develop and incorporate coordination drawing information into Building Information Model established for Project.
 - a. Each of the Prime Contractors shall model their respective systems in the BIM model that are part of their contract and provide updated files to the HVAC contractor.
 - b. The HVAC contractor (Prime Coordinator) shall perform three-dimensional component conflict analysis as part of the preparation of coordination drawings. Resolve component conflicts with each Prime prior to submittal. Indicate where conflict resolution requires modification of design requirements by Architect and obtain approval of Architect.
 - c. HVAC contractor shall revise the BIM model as necessary to reflect the coordination changes. HVAC contractor shall pay for the cost of revisions to the BIM model. HVAC contractor shall include all cost due to the revisions of project changes such as but not limited to RFI, ASI's and owner changes. All modifications, enhancements, additions, and changes to structural, mechanical, electrical, plumbing, fire protection, or HVAC components shall be made by the respective Prime Contractors responsible for that system as part of their contract.



2.0 DEFINITIONS

- 2.01 **Base Structural Model** – the structural steel mill order drawing file showing all structural elements. This model is not necessarily fully detailed with all connections.
- 2.02 **Base Architectural Model** – a combination of the Base Structural Model and key architectural elements. This model is to be used by all coordination participants as the background file in which to develop their work. No information within this model will be changed through the coordination process. It is for reference only.
- 2.03 **Base Composite Model** – this model includes all trade drawing files within the Base Architectural Model as a representation of the completed systems. This model is used to run the intermediate clash reports and is considered a work in progress.
- 2.04 **Final Coordination Model** – this model shows all trades’ systems fully coordinated within the Base Architectural Model. All clashes have been resolved. No further coordination is required. The work shown within this model represents the upcoming installations of each system.
- 2.05 **Completed Coordination Model** – this model is the close-out submittal to the Owner and includes the information within the Final Coordination Model as well as any project updates that have taken place during installations such as RFI responses, as-built conditions, etc.
- 2.06 **Building Information Model** - A Building Information Model(s) is a digital representation of the physical and functional characteristics of the Project and is referred to in this document as the “Model(s),” which term may be used herein to describe a Model Element, a single Model or multiple Models used in the aggregate. “Building Information Modeling” means the process and technology used to create the Model.
- 2.07 **Level of Development** - The Level(s) of Development (LOD) describes the level of completeness to which a Model Element is developed.
- 2.08 **Model Element** - A Model Element is a portion of the Building Information Model representing a component, system or assembly within a building or building site. Model Elements are represented by the Construction Specifications Institute (CSI) UniFormat™ classification system in the Model Element Table in Exhibit 1 - Article 3.
- 2.09 **Model Element Author** - The Model Element Author is the party responsible for developing the content of a specific Model Element to the LOD required for a particular phase of the Project. Model Element Authors are identified in the Model Element Table in Exhibit 1 - Article 3.
- 2.10 **Model User** - The Model User refers to any individual or entity authorized to use the Model on the Project for analysis, estimating, or scheduling.
- 2.11 **TCD** – Trade contract drawings developed by MEP contractor.

3.0 COORDINATION DRAWING PROCESS–GENERAL REQUIREMENTS.

- 3.01 The coordination model shall be derived from the design base composite model which shall be in a (Program File Format – Ex: Revit 2023) format and utilized by all coordination participants. The A/E is to provide this base composite model as needed at each plan deliverable for coordination efforts. This model will be utilized to establish field installation sequence, resolve trade coordination issues prior to installation, and to make the most efficient use of installation space without sacrificing system performance for mechanical, electrical, structural, and architectural systems. (Program File Format – Ex: NAVISWORKS or IFC) design review software will be used to document, identify and resolve interferences between all trades.



- 3.02 Communication is a critical element to the success of this coordination process. All project team members must be in constant communication to keep the process moving forward according to the sign-off schedule (5.1). Constant collaboration is expected of all team participants and each participant should be proactive in identifying and resolving design, engineering, and model interferences. Contractors avoiding the coordination process shall receive liquidated damages for missing meetings and negatively impacting project completion.
- 3.03 All trade contractors own their respective modeling for their contract work. EDiS Company will facilitate and lead the 3-D coordination modeling process. It is the responsibility of all coordination participants to resolve discrepancies pertaining to their own model. All trades shall be responsible for collisions/clashes/coordination issues involving their respective trade(s) and proposed work. Coordinated work takes precedence over field routed systems. Each Contractor to provide LOD 350 total coordination models for sign off.
- 3.04 Coordination meetings will occur weekly starting TBD. Selected coordination team members are required to generate a clash-free model inclusive of all systems. The following participants are required to attend the weekly coordination meetings:
- 3.05 A mandatory coordination kick-off meeting for all participants will review; team collaboration, the execution process, the coordination schedule, establishing zones per system, use of the coordinated elements during construction, project specific information and requirements, and model/document standards.
- 3.06 Coordination meetings will be held at Virtual Goto Meeting to review the model's progress per the schedule and process indicated.
- 3.07 Utility corridors and above ceiling space for each trade, will be established by the group at the beginning of the process. These zones will be adjusted through the coordination process to meet installation requirements and feasibility.
- 3.08 All participants are required to identify the submittals required for accurate detailing of the coordination model (such as equipment, light fixtures, etc.) and to obtain final approval so the information can be incorporated into the modeling process.
- 3.09 The 3-D coordination modeling process replaces the standard submittal process as a submittal. Exceptions: The submittals issued to reflect the 3-D model content issued to A/E.
- 3.10 Meeting Procedures:



Meeting Type	Project Stage	Frequency	Participants	Location
EDIS BIM COMPASS	PRE-CON	Once	EDiS Team & Contracts #	EDIS Office
BIM Requirement Kick-off	Construction	Once	EDiS Team & Contracts #	Site Trailer
BIM Coordination	Construction	Weekly	EDiS Team & Contracts #	Site Trailer
BIM Clash Detection	Construction	Weekly	EDiS Team Issue to Contracts	Site Trailer
Field Installation Process Coordination Meetings	Construction	Weekly	EDiS Team & Contracts #	Site Trailer
TCD Drawings	Construction	Weekly	Contracts Mechanical	Site Trailer
Sign off on TCD Drawings	Construction	At completion	All Parties w/Contract	Site Trailer

NOTE: All contracted parties involved with coordination are required to sign off on all coordinated models via sign off TCD drawings. All clash reports issued to subcontractors require completion by next BIM meeting.

3.11 The coordination meeting:

- 3.11.1 The purpose is to review and resolve items on the current clash report in conjunction with the project coordination schedule. The meetings will focus on clashes that cannot be resolved by internal collaboration. EDiS Company will facilitate the meeting and will make final decisions on clash resolution that are the least impact to the project as a whole. COORDINATION MEETINGS WILL NOT BE USED TO RESOLVE INDIVIDUAL MODELER'S/ENGINEER'S/ARCHITECTURE'S/CONTRACTOR'S WORK. If a Contractor does not post a clash-free system of its own work or that only contains a very limited number of clashes internally (Example: Fire Sprinkler Clashing with Fire Sprinkler), that Contractor will be considered unprepared for the meeting and will be responsible for any delays to the project schedule and any associated costs due to that delay which shall be determined by EDiS Company.
- 3.11.2 Each team participant will review the clash report prior to the subsequent coordination meeting in order to clean up any clashes that can be made without review by all participants.
- 3.11.3 All project participants are expected to be prepared for the meeting with new drawing work of the next area to be coordinated per the coordination schedule and any drawing changes based on the published clash report. Each participant will have available any shop model, submittals or other materials required to solve identified or potential conflicts.
- 3.11.4 The coordination schedule will be maintained, and all identified conflicts addressed and resolved per the construction schedule. The coordination schedule may change as a result of design and/or model changes requested and made by the Owner, Architect or Engineer. In addition, the coordination schedule assumes selection of equipment is made within the time



frame of the construction schedule as needed so it is incorporated into the coordination efforts without delay.

- 3.11.5 All agreed upon corrections to identified clashes determined by the team at the Coordination Meeting are to be updated and resolved prior to the next meeting.
- 3.12 When an area of the model is fully coordinated and clash-free, each participant agrees:
 - 3.12.1 That each trades work is fully coordinated and will be installed per the signed off area as reflected in the coordination model. Sign off drawings from each trade are turned over in PDF form with projects title block. EDiS Company will include legend and title block for trade PDF file.
 - 3.12.2 All trades to provide Total Coordination drawings at the time of sign off. TCD's are drawings which include all trades sign off models. Models are submitted for turn over to EDiS Company. The purpose for TCD's is to provide coordinated building models for jobsite coordination. Models from Contractors to include all but not limited to: item elevations, product type and all equipment tags.
 - 3.12.3 During the installation of each trade's work, EDiS Company will refer to the signed off report and the 3-D model to resolve any conflicts. Each installation firm agrees to install all work per the signed off drawings/model, without deviation. If a deviation, during installation, takes place without prior approval from all detailing parties, it will be the responsibility of the installing contractor to tear out the work and install it as shown on the signed off drawings/coordination model. The cost of this work will be evaluated when the issues arise; however, the party responsible for the conflict will be responsible for the cost of the fix, including the additional detailing time of all parties involved.
 - 3.12.4 The model is not considered to be the final coordination model until the BIM Coordinator, EDiS Company's Project Manager, A/E, and Owner has approved all clash free systems and routings and documents are signed off by all parties (contractors).
- 3.13 Should a conflict arise during installation that was missed during the coordination process, and not a result of deviating from the signed off area, the coordination team will work together to find a solution that is optimal for all trades and the project.
- 3.14 The final coordination model shall be kept up to date by all participants during construction to include as-built information and any other pertinent data that is essential to the project. The data will be submitted electronically in Revit, AutoCAD, NWC, PDF format. Items to be included are:
 - 3.14.1 RFI responses.
 - 3.14.2 Design change orders or designs that are in addition to the original contract documents.
 - 3.14.3 Equipment will be tagged with all (Owner required) identification information within the model (ex. Equipment schedule information and O&M Manuals). This identification information will be the same and correspond to all other close-out documentation. This close-out documentation including O&M manuals, maintenance information, etc. will be included in PDF form.
 - 3.14.4 EDiS will provide a location for the Contractor to submit the required documentation at a later time. EDiS will generate the completed coordination model based on these documents for turn-over to the owner.
 - 3.14.5 Tekla or Navisworks will be utilized to link PDF closeout documents, select RFI's, select Images, etc., to the closeout model. Contractors need to provide closeout documents in the format requested by EDiS for the closeout model as well as adding smart data to other model type files as determined necessary by EDiS within the time frame A/E dictates. For example, if



Revit files are needed to produce the closeout model, EDiS may direct Contractor to set up certain Revit views for the exporting of files which make up the as-built models. A/E may also request that the Contractor create viewpoints for their equipment in as-built model.

- 3.15 Data for coordination will be available on Dropbox, to be referenced by the other participants. Models and drawing files will never be tampered with by non-owners of the file. If a mistake occurs and a drawing is inadvertently modified, the responsible party is required to alert the project team.
- 3.16 The Owner's commissioning agent can attend the coordination meeting to review the detailing effort for commissioning related items.
- 3.17 All trades will provide Level of Development (LOD) (350) models for weekly coordination meeting.

4.0 REQUIREMENTS OF THE LEAD COORDINATOR

- 4.01 The Lead Coordinator will be EDiS Company.
- 4.02 Identification of a common insertion point for all drawing files. (Utilize Revit Models origin)
- 4.03 A/E to provide Lead Coordinator model exports to 2-D/3-D CAD of each trade component as needed to coordination. Origins to be maintained in exports.
- 4.04 All coordination files and process is via Revizto 5 file uploads and backgrounds are in Revizto.
- 4.05 Using the A/E's files, the Lead Coordinator will utilize & maintain the base architectural model.
 - a. The base architectural model is a combination of the base structural model and other architectural elements. These architectural elements will include all elevated 3-D architectural elements including, but not limited to, all walls that extend to the deck, fire and smoke walls, soffits and associated framing, ceiling planes, and finish floor planes.
 - b. This model will consist of cleaned-up floor plans void of any excessive notations, leaders, bubbles, marks, grid lines, etc. that are not required for detailing development and that may potentially cause a conflict in the base composite model.
 - c. In the event of changes to the A/E's contract documents, the A/E must revise the base architectural model/MEP/structural models and distributed to all coordination participants. This will require Contractor participation as needed by A/E to complete the revised models for directive. Revision work will be directed by Owner through an executed change order.
 - d. The base architectural models will be distributed and maintained by EDiS Company.
- 4.06 Collation of all trades' detailing models as posted to the project's web-based posting site into a Base Composite Model through the use of Navisworks 2023.
 - a. Establish a standard two inch (2") soft tolerance within the clash detection software. This tolerance will result in a reported clash for any elements drawn closer than two inches (2") to one another.
 - b. Assess and include most current clash files including the generation of a clash reports and distribution to all project participants per the coordination schedule.
 - c. Collect final as-built files from all trades and generate a Final Coordination Model to submit to CM as part of the close-out requirements.
 - d. Coordination meeting minutes shall be kept by EDiS Company Lead Coordinator or EDiS' Project Manager showing issues and resolution dates.
- 4.07 Each Trade Subcontractor is required to sign off on all coordinated models and drawings ensuring they are 100% coordinated and clash free fabrication level models and shop drawings.
- 4.08 All contractors and trades are responsible for using/acquiring a **REVIZTO license software**. The cost is \$1,200 per license, per contractor.



5.0 REQUIREMENTS OF THE STRUCTURAL STEEL CONTRACTOR

- 5.01 Obtain from the A/E Structural Revit files to be used in the generation of the base structural model.
- 5.02 The structural Contractor will develop and provide the base structural model within the time frame dictated by EDiS and provide structural model updates to ensure the coordination team is coordinating the MEP/FP to the most up-to-date structural model.
- 5.03 All structural framing members in the final sizes and locations (typically referred to as a “mill order” or “procurement” model) will be shown in the model as 3-D objects with surfaces. At the discretion of the lead coordinator, this model may be void of all hardware and secondary structural steel but should include the major components: primary steel, metal decking, slab on metal decking, and gusset plates.
- 5.04 The structural insertion/datum point must match the architectural insertion/datum location. No detailing work shall take place until the insertion points of the architectural and structural models match.
- 5.05 The steel Contractor is responsible for resolving their own modeling issues (i.e.: steel not to scale, missing key structural components, missing surface data, and model showing as wire frame data, model exported to proper file format, etc.). The steel Contractor is responsible to provide a steel design model in a usable format for all coordination participants to reference as the base structural model.
- 5.06 A FINAL 3-D steel model and 2-D shop drawings shall be submitted to the structural engineer of record and used for field erection. It must be completed and submitted in accordance with the BIM schedule. This model shall consist of:
 - a. All primary and secondary steel including metal deck, slab on metal deck, actual gusset plate sizes, connection details, edge of slab details (pour stop), brick relief angles, embeds, anchor bolts, and other miscellaneous metals. Curtain Wall embeds modeled by others.
 - b. Submit final approved files to Lead Coordinator for insertion into the coordinated model, and to the design team in the form of shop drawings and/or Navisworks compatible model.

6.0 DETAILING REQUIREMENTS OF ALL PARTICIPANTS

- 6.01 File sharing information:
 - Site Contractor (SIT-1)**
 - a. All items which appear in a schedule and has a schedule name will correspond with a 3-D model element including model element data.
 - b. Attend BIM trade coordination meetings.
 - c. Deliver three-dimensional model to coordination team
 - d. Required to deliver items identified in G204 matrix such as
 - e. Develop appropriate tie-in locations of utilities with trades. Site contractor required to deliver main connections in model format
 - f. Site underground items outside direct tie in locations not required in three dimensional models.
 - g. Sanitary piping tie-in
 - h. Storm water tie-in
 - i. Domestic water tie-in



- 6.02 The in-progress (Coordination Software – Ex: IFC/NWC/Cad) naming convention will be: project-trade-level. Examples: Project Designation -MechPipe-1

Project Designation -HVAC-1
Project Designation –Fire Protection-1
Project Designation -Elec-1
Project Designation -Plumbing-1
Project Designation -TeleCom-1 or AV-1
Project Designation –Pneumatic Tube-1, etc.

Additional designations may be added based on project specific scope and deliverable requirements and/or deemed as a critical component to the coordination process.

- 6.03 Each model posted by the contractor shall contain model elements for the purpose of system identification and isolation during the clash detection process. Example:

HVAC-1 shall contain model elements for:

- a. All items which appear in a schedule and has a schedule name will correspond with a 3-D model element including model element data.
- b. Supply
- c. Return
- d. Exhaust
- e. Fire Smoke-Dampers
- f. VAV clearance
- g. AC Door Access
- h. Fan Coil Units
- i. FCU Access
- j. Equipment
- k. Equipment Pads
- l. Equipment Clearances
- m. Hangers (designated per system)
- n. Duct insulation
- o. Duct model to the outside face of dimensional duct
- p. Access zones, all equipment

MechPipe-1 shall contain model elements for:

- a. All items which appear in a schedule and has a schedule name will correspond with a 3-D model element including model element data.
- b. Hydronic Pipe Supply
- c. Hydronic Pipe Return
- d. Chilled Pipe Supply
- e. Chilled Pipe Return
- f. Shutoff Access
- g. Equipment
- h. Equipment Pads
- i. Equipment Clearances
- j. Hangers
- k. Pipe insulation

Plumbing-1 shall contain model elements for:



- a. All items which appear in a schedule and has a schedule name will correspond with a 3-D model element including model element data.
- b. Domestic Water Supply
- c. Domestic Water Return (with additional layer designations for hot and cold)
- d. Gas
- e. Med-Gas
- f. Shutoff Access (designated per system)
- g. Sanitary
- h. Vent
- i. Roof Drain
- j. Rain Conductors
- k. Equipment
- l. Equipment Pads
- m. Equipment Clearances
- n. Hangers (designated per system)

Elec-1 shall contain model elements for:

- a. All items which appear in a schedule and has a schedule name will correspond with a 3-D model element including model element data.
- b. Lights
- c. Light Clearance
- d. Conduit (with additional layer designation for power and data)
- e. Cable Tray
- f. Cable Tray Access Clearance
- g. Pull Boxes
- h. Pull Box Access Clearance
- i. J-Boxes
- j. Elec. Panels
- k. Elec. Panel Access Clearance
- l. Elec. Troughs
- m. Elec. Trough Access Clearance
- n. Equipment
- o. Equipment Clearances
- p. Equipment Pads
- q. Hangers

Fire Protection1 shall contain model elements for:

- a. All items which appear in a schedule and has a schedule name will correspond with a 3-D model element including model element data.
- b. Mains
- c. Branches
- d. Shutoff Access
- e. Hangers

Pneumatic Tube-1 shall contain model elements for:

- a. All items which appear in a schedule and has a schedule name will correspond with a 3-D model element including model element data.
- b. Equipment



- c. Equipment Access
- d. Hangers

Concrete PreCast Plank

- a. All items which appear in a schedule and has a schedule name will correspond with a 3-D model element including model element data.
- b. Plank w/ camber
- c. Plank w/ cores and openings
- d. Plank w/ all conduit or piping as required
- e. Plank embeds
- f. Plank rebar
- g. Plank setting plates or items
- h. Plank vertical chase requirements must be modeled and coordinated

Additional sub layers may be added based on project specific scope and deliverable requirements and/or deemed as a critical component to the coordination process.

- 6.04 Clash detection files will be posted to **Revizto** before **12:00 PM**, on **Wednesday and Friday** by each of the trades. The lead coordinator will also post updated coordination models as needed. The lead coordinator will maintain the master coordination files. The weekly coordination model will be name abbreviated Project Name-Floor-Coordination Model-Month-Day-Year.

All coordination participants will maintain a current control copy of their own drawing files outside of the project's web-based posting site. Control drawings are to include all previously posted files.

- 6.05 Trade Colors in the Coordination environment:

- a. Duct Supply – Dark Green
- b. Duct Return- Light Blue
- c. Duct Exhaust –Light Green
- d. Mech Pipe- Orange
- e. Pressure lines/Gas – Tan
- f. Sanitary/Vent – Brown
- g. Rain Conductors/Roof Drains – Maroon
- h. Domestic Water- Blue
- i. Fire – Red
- j. Pneumatic – Purple
- k. Electrical – Yellow

- l. All Base Architectural Elements (walls, soffits, ceiling & floor planes, etc.) will assume Arch model color scheme saved in the export or Lead Coordinator will modify select color scheme in the coordination model.

- m. Steel – Dark Grey

- n. Any hangers and equipment (that is fed per the designated system) will assume the same color of that system it is associated with. Additional color schemes may be added based on project specific scope and deliverable requirements and/or deemed as a critical component to the coordination process.

- 6.06 When posting drawing files for coordination:

- a. Posted Contractor coordination files of each trades system should be clash-free with in their respective data. To clarify; trades should refrain from posting data that shows their systems clashing with itself.



- b. When coordination of an area is completed there should not be any unresolved clashes remaining.
 - c. These files should be void of any text, dimensions or any other notations.
- 6.07 Each coordination participant is required to submit three (3) complete sets of installation drawings as well as electronic PDF's prior to any work being installed in the field. If A/E spec requires more or less than that will govern over this document. These complete drawings are to be fully dimensioned and notated. Items to be noted in the final, fully coordinated drawing paper and electronic files of each system include:
- a. Bottom and top elevations of duct, pipe, conduit racks, cable trays etc. must be indicated (where applicable).
 - b. Dimensions shall be shown from the gridlines to the centerline of each element drawn (round duct, pipe, cable tray, etc.) and from finished floor.
 - c. Height to top of light housing assembly must be indicated.
 - d. Labeling of all equipment.
- 6.08 During the coordination drawing effort, priority will be given to those systems that have the least flexibility. The following list is a descending order of the system priority and shall be used as a general guideline. Throughout the coordination drawing effort, adjustments and deviations to this list can be made with the approval of EDiS Company. (0'- 6") clear above the ceiling shall be maintained for access and construction of the ceiling, whenever possible. Required maintenance and/or code access spaces and set-backs take precedence over all systems.
- a. Gravity Pipe
 - b. Plumbing Vent
 - c. Ductwork and appurtenances
 - d. Cable tray
 - e. Recessed light fixtures
 - f. Fire protection piping and fixtures
 - g. Electrical conduit over (3/4") in diameter
 - h. Pneumatic tube and other record or material conveying systems
 - i. HVAC piping
 - j. Plumbing, supply and medical gas piping
 - k. Electrical conduit smaller than 3/4" in diameter
 - l. Above ceiling miscellaneous metal supports
 - m. Provide all copper tube routes (racks) for mechanical systems, including valves, clearance zones and hangers.
- 6.09 Items to be included in the detailed drawing progress include:
[For the following trades HVAC, HVAC piping, electrical, fire protection, building management, carpentry, general works trades and structural]
- a. All systems must be fully detailed and shown as individual elements including ductwork, all piping 3/4" and larger, pneumatic tubing, exterior wall connections, any piping that is smaller than 1/2" that is racked or banked, etc.
 - b. Ductwork is to include size, layout and routing of all metal and flex ductwork, re-heat coils, terminal units, filters registers, grilles, diffusers, and similar features; provide notation for diffuser boot sizes and heights and any other special features
 - c. All valves, dampers and VAV's or heat pumps will note any items requiring access for service and maintenance as well as access doors in inaccessible ceilings.



- d. All piping valves, boxes, supports, etc. are to be fully detailed
 - e. Sprinkler head locations shall be shown on ceiling plans.
 - f. All electrical conduits two inches (1 1/4") or more in diameter are to be modeled and shown in addition to smaller diameter conduit that is racked or banked.
 - g. Electrical items such as hangers, supports, electrical fixtures, lights, speakers, detectors, sensors, cable trays, raceways, sleeves, pull boxes, and access space claims, etc. must be shown.
 - h. If an element is not shown, under the lead coordinators approval, it will be assumed to be field routed and to not interfere with the other elements that are shown or within code clearances. Contractors who field route their elements are responsible to ensure their installation will be feasible and void of creating a clash in the field. Coordinated items take precedence over field routing.
 - i. All major hangers and supports (including sway bracing, equipment bracing, hangers, etc.), penetrations, openings must be shown for all systems. Sharing of supports with other systems is discouraged but can be accomplished with prior owner and/or field inspector approval.
 - j. All insulation must be shown with appropriate thicknesses. All insulation & clearance zones will be modeled or accounted for during the clash detection process.
 - k. Sprayed Fire Protection (all methods): If required by your building type, establish a safe thickness from all structural objects with which to run your clashes. Assume fire spray will be two inches (2") thick.
 - l. Engineered stud framing must be modeled for king studs and doors.
 - m. Code clearances and maintenance access clearances must be shown and maintained; these include, but are not limited to access to VAVs, air handling units, egresses around pumps and tanks, smoke FDs, electrical panels, pneumatic tube transfer units, cable tray access, pull boxes, valve access, etc.
 - n. All trades must coordinate and detail their systems with the intent of installing each system at the optimal elevation above ceiling, taking into consideration, access to equipment for maintenance, repairs, connections, filters and removal while eliminating or minimizing the impact to surrounding components.
 - o. All concrete plank modeled by plank installers contract. 3-D model the plank per structural design calculations. Include all but not limited to cores, hollow sections, vertical sleeve locations, rebar, setting embeds and misc. structural attachment items
- 6.10 Established Clash Files are to be incorporated to ensure proper coordination. List of those files to be provided by the Lead Coordinator.
- 6.11 Refer to Appendix B – Soft Clash Requirements for additional soft-clash requirements.

7.0 SCHEDULE OF DRAWING COMPLETION AND SIGN-OFF

- 7.01 The participants must plan on the coordination process taking two to three months. The coordination schedule is as follows:
This table will be populated at the BIM Coordination Kick-off Meeting. OR Schedule to be developed as part of the master construction schedule development (see Section 00230).



Zone	Floor	Coordination Meeting	Sign-Off Date

7.02 At the completion of each floor, the team will determine the specific "priority walls" that will be constructed full-height ahead of other interior partitions and MEP installations.

7.03 D MEP/FP Coordination Team

- a. The goal of the coordination team will be to integrate the architectural, structural, mechanical, electrical, fire protection, and project specific elements into a collaborative 3-D model to identify and resolve issues pertaining to MEP/FP systems and to ensure succinct and expedited field installations of these systems following the release of each zone/floor after clash free conditions are met. (Filled out at BIM Coordination Kick-off Meeting)

BIM Coordinator	EDiS Company
Main Contact	Chris Donahue
Phone Number	302-893-0492
Email Address	cdonahue@ediscompany.com
Project Manager	EDiS Company
Main Contact	Jonathan Shanus
Phone Number	302-893-8431
Email Address	jshanus@ediscompany.com
Project Engineer	EDiS Company
Main Contact	TBD
Phone Number	
Email Address	
Project Superintendent	EDiS Company
Main Contact	TBD
Phone Number	
Email Address	
Site Contractor	TBD
Main Contact	
Phone Number	
Email Address	



HVAC	TBD
Main Contact	
Phone Number	
Email Address	
Electrical	TBD
Main Contact	
Phone Number	
Email Address	
Concrete	TBD
Main Contact	
Phone Number	
Email Address	
Plumbing and Piping	TBD
Main Contact	
Phone Number	
Email Address	
Architectural	TBD
Main Contact	
Phone Number	
Email Address	
MEP/FP Engineers	TBD
Main Contact	
Phone Number	
Email Address	
Structural Steel	TBD
Main Contact	
Phone Number	
Email Address	
Miscellaneous Steel	TBD
Main Contact	
Phone Number	
Email Address	



LOD REQUIREMENT

ARTICLE 1: GENERAL PROVISIONS

- 1.1 This document defines protocols, expected levels of development, and authorized uses of Building Information Models on this Project. It assigns specific responsibility for the development of each Model Element to a defined Level of Development at each Project phase. Where a provision in this Exhibit conflicts with a provision in the Agreement into which this Exhibit is incorporated, the provision in this Exhibit will prevail.
 - 1.1.1 The parties agree to incorporate this Exhibit by reference into any other agreement for services or construction for the Project.

ARTICLE 2: LEVEL OF DEVELOPMENT (LOD)

- 2.1 The following LOD descriptions identify the specific content requirements and associated authorized uses for each Model Element at five progressively detailed levels of completeness. Each subsequent LOD builds on the previous level and includes all the characteristics of previous levels.
- 2.2 **LOD 350**
 - 2.2.1 **Model Content Requirements.** Overall building massing indicative of area, height, volume, location, and orientation may be modeled in three dimensions or represented by other data.
 - 2.2.2 **Authorized Uses**
 - 2.2.2.1 **Analysis.** The Model may be analyzed based on volume, area and orientation by application of generalized performance criteria assigned to the representative Model Elements.
 - 2.2.2.2 **Cost Estimating.** The Model may be used to develop a cost estimate based on current area, volume or similar conceptual estimating techniques (e.g., square feet of floor area, condominium unit, hospital bed, etc.).
 - 2.2.2.3 **Schedule.** The Model may be used for project phasing and overall duration.
- 2.3 **LOD 350**
 - 2.3.1 **Model Content Requirements.** Model Elements are modeled as specific assemblies accurate in terms of quantity, size, shape, location, and orientation. Existing building elements are modeled as shown on building record drawings. Non-geometric information such as object description and object tags (door number, equipment number, etc) and quantities should be included with each object. Examples of the details required for systems modeled to LOD 300 include, but are not limited to:
 - a. Show all, but not limited to, unground utilities, plumbing and mechanical, concrete modeled as contract documents.
 - b. Site Utilities (see matrix and 6.1 front end)
 - c. Masonry
 - d. Steel decking
 - e. PRECAST PLANK



- f. Correct slopes for gravity piping for sanitary, storm or wet fire suppression systems.
- g. Piping materials specifically called out on documents included with model element attributes (generic manufacturer for system components are acceptable).
- h. Insulation around Pipe and Ducting.
- i. Duct dampers included with the duct system.
- j. Doors/Frames (hollow metal and storefront)
- k. Owner Furnished Fixtures, Equipment, etc. generically modeled as space claims by the Model Element Author (MEA).
- l. Concrete
- m. Anchor bolts
- n. Structural steel
- o. Steel stairs, handrails
- p. Floor/roof penetration steel
- q. Significantly sized support hangers and sleeves for all systems
- r. Uni-Strut associated with system components if it is located in a tight overhead space (case by case basis)
- s. Architectural millwork/casework
- t. Metal panels and support steel
- u. Curtainwall system
- v. Steel stud framing including kickers and trusses at floor penetrations.
- w. Valve locations (clearance)
- x. Access panels (these should be modeled with the system they provide access to).
- y. Conduit racks or other substantially wide / bundled electrical routing. (these can be generically modeled, i.e. extruded boxes, space claims)
- z. Single conduit runs associated with any system (lighting, power, controls, etc) if needed to coordinate concrete coring.
- aa. Kitchen equipment
- bb. MEP/FP & Low Voltage Equipment
- cc. MEP/FP & Low Voltage Systems
- dd. Pull box locations and any extra space claims for their access.
- ee. Telecom & Data

2.3.2 Authorized Uses

- 2.3.2.1 **Construction.** Suitable for the generation of traditional construction documents. Contractors may utilize this model for coordination purposes and creation of shop drawings.
- 2.3.2.2 **Analysis.** The Model may be analyzed for performance of selected systems by application of specific performance criteria assigned to the representative Model Elements.
- 2.3.2.3 **Schedule.** The Model may be used to show ordered, time-scaled appearance of detailed elements and systems.



ARTICLE 3: MODEL ELEMENTS

3.1 **Reliance on EDiS Company's Model Element Matrix**

- 3.1.1 The EDiS Company Model Element Matrix at the end of this section identifies (1) the LOD required for each Model Element at the end of each Project phase, and (2) the Model Element Author responsible for developing the Model Element to the LOD identified. Each Model Element Author's content is intended to be shared with subsequent Model Element Authors and Model Users throughout the course of the Project.
- 3.1.2 It is understood that while the content of a specific Model Element may include data that exceeds the required LOD identified in the Model Element Table for a particular phase, Model Users and subsequent Model Element Authors may rely on the accuracy and completeness of a Model Element consistent only with the content required for a LOD identified in the Model Element Table.
- 3.1.3 Any use of, or reliance on, a Model Element inconsistent with the LOD indicated in the Model Element Table by subsequent Model Element Authors or Model Users shall be at their sole risk and without liability to the Model Element Author. To the fullest extent permitted by law, subsequent Model Element Authors and Model Users shall indemnify and defend the Model Element Author from and against all claims arising from or related to the subsequent Model Element Author's or Model User's modification to, or unauthorized use of, the Model Element Author's content.

3.2 **Table Instructions**

- 3.2.1 The Model Element Table at the end of this section indicates the LOD to which each Model Element Author (MEA) is required to develop the content of the Model Element at the conclusion of each phase of the Project. EDiS Company holds the rights of this table and all ownership right for edits are performed via EDiS Company.
- 3.3 EDiS Company's Model Element Matrix AIA Document G204-2022 (attached).
- 3.4 Insertion Point (attached).

ARTICLE 1: GENERAL PROVISIONS

- 1.2 This document defines protocols, expected levels of development, and authorized uses of Building Information Models on this Project. It assigns specific responsibility for the development of each Model Element to a defined Level of Development at each Project phase. Where a provision in this Exhibit conflicts with a provision in the Agreement into which this Exhibit is incorporated, the provision in this Exhibit will prevail.
 - 1.1.2 The parties agree to incorporate this Exhibit by reference into any other agreement for services or construction for the Project.



AIA[®] Document G203[™] – 2022

BIM Execution Plan

BIM EXECUTION PLAN VERSION NUMBER:

DATE: July 31, 2023

PROJECT NAME:

(Name and location or address of the Project)

Harrington Public Library
Little Mastens Corner Road
Harrington, DE 19952

PROJECT OWNER:

(Name and address)

City of Harrington
540 S. DuPont Highway
Suite 1, Third Floor
Dover, DE 19901

EXHIBIT NAME:

(Identify, by date and full title, the BIM and Digital Data Exhibit for the Project (the "Exhibit"))

INTENDED GOALS FOR MODELS ON THE PROJECT:

(Summarize the intended goals for Model documentation, process, and workflow.)

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be incorporated into an agreement between the Parties.

TABLE OF ARTICLES

1	PROJECT INFORMATION
2	DESIGNATED DELIVERY MILESTONES FOR MODEL VERSIONS
3	SOFTWARE REQUIREMENTS AND FILE EXCHANGE PROTOCOL
4	DATA SECURITY MEASURES
5	MODELING PROTOCOLS
6	MODEL MANAGEMENT PROTOCOLS
7	LEVELS OF DEVELOPMENT
8	RELIANCE AUTHORIZATION PROTOCOLS FOR INTERIM DELIVERABLES
9	IDENTIFICATION OF MODELS
10	OTHER BIM OR MODELING PROVISIONS
11	EXHIBITS AND ATTACHMENTS

The terms used in this BIM Execution Plan have the same meaning as those in the Exhibit.

This BIM Execution Plan may be updated, as appropriate, in accordance with the terms of the Exhibit.

ARTICLE 1 PROJECT INFORMATION

§ 1.1 Project Participants Directory

(Identify all Project Participants developing or using Models, their discipline or trade, and contact information for their key representatives.)

Project Participant (Firm or company name)	Discipline or Trade	Contact Name (Insert individual name and Project role or title)	Contact Information (Insert phone number, email address, and other contact information)

§ 1.2 Project Schedule

(Insert or attach the Project schedule, including a detailed schedule for Model development. If appropriate, include the schedule's version or date.)

TBD

§ 1.3 Existing Data

(Describe any existing survey files, as-built files, documents, or BIM content. Include any license or usage restrictions.)

Request files from Becker Morgan Group.

ARTICLE 2 DESIGNATED DELIVERY MILESTONES FOR MODEL VERSIONS

Designated Delivery Milestones for Model Versions

(Insert or attach the delivery schedule, identifying Designated Delivery Milestones for Model Versions. State whether a Model Element Table will be included for this purpose as set forth in Article 7.)

ARTICLE 3 SOFTWARE REQUIREMENTS AND FILE EXCHANGE PROTOCOL

§ 3.1 Modeling Software

(Indicate software and version(s) to be used for modeling and any other necessary information.)

Software	Version	Other Information
Revizto	5	

§ 3.1.1 Modeling Software Updates. All Project Participants agree to coordinate software updates prior to making any Model file upgrades.

§ 3.2 Other Software Tools

(Indicate other software tools to be used to interface with Models, such as for analysis, coordination, quality management, etc. Include version and update restrictions, if any.)

§ 3.3 File Exchange Protocols

§ 3.3.1 The Project Participants agree to share their respective Model Portion updates as follows:

(Check the appropriate box.)

- ☒ **§ 3.3.1.1 Cloud-Based Collaboration.** The Project Participants agree to use a cloud-based Modeling software platform for developing and sharing Models as follows:
(Indicate software, licensing, and other requirements for hosting the Project. Identify the Project Participant responsible for hosting the Project. Indicate the frequency for Model updates, such as daily, identifying the time of day.)
- ☐ **§ 3.3.1.2 Separate Model Collaboration.** The Project Participants agree to use file sharing of separately developed Models, and shall develop and share their Model Portions as follows:
(Indicate the requirements for preparation of the Model Portion before it is transmitted, including how to handle links and exclusions of links, auditing, and compacting. Indicate the means of transmission, if appropriate. Indicate the frequency of file exchange for Model updates, such as at milestones, or weekly, identifying the day of the week.)
- ☐ **§ 3.3.1.3 Other:**
(Specify the type of Model collaboration, which may include a hybrid of cloud-based and separate Model development.)

§ 3.4 Collaboration Protocols. The Project Participants' protocols for the collaborative use of Models, if any, including communication protocols, method of decision tracking, and co-location requirements are as follows:

§ 3.4.1 Training and Support Parameters. The parameters for any training or support program(s) that will be implemented with respect to any collaboration protocols or technical requirements are as follows:

Training on Revizto is provided via AMP Consulting/Revizto Representative.

§ 3.4.2 Training and Support Costs. The Project Participants are each responsible for their respective software training and support, and associated costs, unless set forth below:

(Identify required software to be used on the Project and for which the Project Participants will be compensated for training and support, and state how the Project Participants will be compensated.)

ARTICLE 4 DATA SECURITY MEASURES

Data Security Measures. In addition to those data security measures identified in the Exhibit, the Project Participants agree to implement the following data security protocols:

(Indicate data security measures, such as data storage, backup, and security measures, to be implemented by all Project Participants.)

ARTICLE 5 MODELING PROTOCOLS

§ 5.1 Project Coordinates. Project coordinates, including Project north, true north angle, and physical horizontal and vertical location in real space, are set forth below. Project coordinates will not be changed without prior agreement from all Project Participants.

(Indicate the Project coordinates, which can be described in writing, represented graphically, or both.)

0, 0, 0

§ 5.2 Model Data Subdivisions. Model Authors agree to reasonably minimize the subdivision of their Model Portion(s). Any changes to subdivided Model Portions shall be communicated to all Project Participants.

§ 5.3 Common Data Fields

(Indicate common data fields intended to be shared for sheet indices and Model coordination.)

§ 5.4 Construction Phasing. If the Project will be constructed in separate phases, then indicate the phases below. The Project Participants agree that Model phases will be consistent across all Models. If additional phases, or modifications to phases indicated below, are required, then all Project Participants agree to use any new or modified phases.

(Indicate the phases for the Project, such as when the Project includes existing buildings.)

§ 5.5 Sheets

(Indicate the standard format(s) for 2D output(s), such as sheet sizes for the Project, title block format, and requirements to name, number, and identify deliverables.)

§ 5.6 Design Options

(Indicate any protocols for addressing or exploring design options.)

§ 5.7 File Naming Conventions

(Indicate protocols for naming each type of file.)

§ 5.8 Modeling Standards

(Indicate standards to be used by the Project Participants, or attach and identify a separate document.)

ARTICLE 6 MODEL MANAGEMENT PROTOCOLS

§ 6.1 Responsibility

(Define individual roles and responsibilities for Model management.)

§ 6.2 Meetings

(Indicate meeting types, the stage or phase within which the meeting occurs, and the meeting frequency.)

Meeting Type	Project Stages or Phases	Frequency
Virtual	Prior to begin field work	weekly

§ 6.3 Quality Control and Model Health.

§ 6.3.1 Internal Quality Control. Each Project Participant is responsible for producing quality Model Portions that can be used and opened effectively by all other Project Participants. Project Participants will perform checks on their respective Model Portions pursuant to Section 6.3.1.1.

§ 6.3.1.1 Model Checking. The following checks should be performed by each Model Author to assure Model quality:
(Describe each quality control measure to be implemented throughout the development of Model Portions.)

- ☐ **§ 6.3.1.1.1 Visual Check.** Perform a visual check to confirm that there are no unintended Model components and confirm design intent has been followed:
(Indicate the frequency with which Visual Checks will be performed and modify the description if required.)
- ☒ **§ 6.3.1.1.2 Interference Check.** Detect problems within individual Model Portions and with the interface between Model Portions where two building components clash, including where required clearances clash:
(Indicate the frequency with which Interference Checks will be performed and modify the description if required.)
- ☒ **§ 6.3.1.1.3 Modeling Protocols Check.** Confirm that the protocols reflected in Article 5 of this BIM Execution Plan have been followed:
(Indicate the frequency with which Modeling Protocols Checks will be performed and modify the description if required.)
- ☐ **§ 6.3.1.1.4 Model Integrity Check.** Check for items that affect the integrity of each Model Portion, such as corrupted Models, duplicated Model Elements, software warnings, Models with overly large file sizes, etc.:
(Indicate the frequency with which Model Integrity Checks will be performed and modify the description if required.)
- ☐ **§ 6.3.1.1.5 Other:**

§ 6.3.2 External Quality Control. Upon receipt of another Project Participant's Model Portion, Project Participants shall report to the Model Author any Model quality issues discovered. Model Authors shall promptly resolve reported Model quality issues and issue a new Version of the Model Portion.

ARTICLE 7 LEVELS OF DEVELOPMENT

§ 7.1 Level of Development Descriptions. The Level of Development (LOD) descriptions shall be as set forth in the Exhibit.

§ 7.2 The Project Participants intend to identify the LOD for Model Elements at Designated Delivery Milestones as follows:

(Check the appropriate box.)

- ☐ AIA Document G205™-2022, Abbreviated Model Element Table
- ☐ AIA Document G204™-2022, Model Element Table
- ☐ Describe the LOD to be applied to Model Elements as follows:
(Describe how the LOD will be applied to Model Elements. Itemize by discipline or trade as appropriate. If the Project Participants will use a custom model element table, then identify that model element table.)

§ 7.3 Level of Accuracy. The level(s) of accuracy used for Model Elements indicated as LOD 500 shall be as follows:
(Describe a single level or multiple levels of accuracy that will be applied to LOD 500 Model Elements.)

ARTICLE 8 RELIANCE AUTHORIZATION PROTOCOLS FOR INTERIM DELIVERABLES

For Interim Deliverables, Model Authors will authorize or limit reliance on Model Versions of their respective Model Portions as follows:

(Define the means of authorization, whether described within the Model Version or in a separate document, or both. If appropriate, attach the authorization text or form as an exhibit.)

ARTICLE 9 IDENTIFICATION OF MODELS

§ 9.1 Identification of Model Versions Enumerated as a Contract Document

(Describe how the Project Participants will identify a Model Version enumerated as a Contract Document, if any, such as by file name, by Model Author, through the use of a Model Element Table, or other method.)

§ 9.2 Identification of Models or Model Portions not Enumerated as a Contract Document

(Describe how the Project Participants will identify a Model or Model Portions that are not enumerated as a Contract Document, such as by file name, by Model Author, through the use of a Model Element Table, or other method.)

ARTICLE 10 OTHER BIM OR MODELING PROVISIONS

Other provisions related to BIM or Modeling are as follows:

All contractors involved with the coordination process are responsible to pay for the Revizto license cost. The license cost is \$1,200.

ARTICLE 11 EXHIBITS AND ATTACHMENTS

(List here any exhibits and attachments to this BIM Execution Plan.)



AIA[®] Document G204[™] – 2022

Model Element Table

MODEL ELEMENT TABLE DATE: July 31, 2023

This Model Element Table dated the day and year written above is incorporated into the BIM Execution Plan between the Parties for the following Project:

(Name and location or address of the Project)

Harrington Public Library
Little Mastens Corner Road
Harrington, DE 19952

BIM EXECUTION PLAN NAME:

(Identify, by date and full title, the BIM Execution Plan into which this LOD Table is incorporated) (the “BIM Execution Plan”)

Harrington Public Library BIM Project Execution Plan

MOST RECENT BIM EXECUTION PLAN VERSION OR DATE: July 31 2023

EXHIBIT NAME:

(Identify, by date and full title, the BIM and Digital Data Exhibit into which the BIM Execution Plan is incorporated) (the “Exhibit”)

Harrington Public Library BIM Project Execution Plan

TABLE OF ARTICLES

ARTICLE 1 LEVELS OF DEVELOPMENT

ARTICLE 2 MODEL ELEMENT TABLE

The terms used in this Model Element Table have the same meaning as those in the Exhibit.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be incorporated into an agreement between the Parties.

ARTICLE 1 LEVELS OF DEVELOPMENT

§ 1.1 Level of Development Definitions. The Level of Development (LOD) descriptions shall be as set forth in the Exhibit.

§ 1.2 Any Model Element that does not have an LOD defined at a phase is not required to be Modeled at that phase. If a Model Element is modeled and no LOD is provided at that phase, the Model Element may not be relied upon.

ARTICLE 2 MODEL ELEMENT TABLE

§ 2.1 Table Instructions. The Model Element Table in Section 2.4 indicates the LOD to which each Model Element shall be developed at each identified Project milestone and the Model Element Author.

§ 2.2 Model Element Table Abbreviations. Abbreviations for each Model Element Author to be used in the Model Element Table are as set forth in the Abbreviations tab.

§ 2.3 Model Element Table Notes. Notes for each Model Element in the Model Element Table are as set forth in the Notes tab. Limitations or qualifications on Model Elements may be described in the Notes.

§ 2.4 Model Element Table

Identify (1) whether a Model Element will be modeled, (2) the LOD required for each Model Element at	Modeled	Construction Manager Construction Coordination			As-Built (TBD)		
Indicate whether the Model Element is included in the Project by inserting an “x” in the "Modeled" column. If a “Modeled” cell is left blank, the Element in that row will not be included in a Model Portion.							
Insert abbreviations for each MEA identified in the "Abbreviations" tab.							
Project Milestones headings may be modified to identify delivery milestones as defined in the Agreement.							
Contract naming listed in attachment.							
NOTE: LODs must be adapted for the unique characteristics of each Project. *All coordination is in Revizto							
Model Elements Utilizing CSI UniFormat™		LOD	MEA	Notes	LOD	MEA	Notes
A Substructure							
A10 FOUNDATIONS							
A1010 Standard Foundations							
A1010.10 Wall Foundations		400	B-02				
A1010.30 Column Foundations							
A1010.90 Standard Foundation Supplementary Components		400	B-02				
A1020 Special Foundations							
A1020.40 Foundation Anchors		400	B-02				
A1020.80 Grade Beams		400	B-02				
A20 SUBGRADE ENCLOSURES							
A2010 Walls for Subgrade Enclosures							
A40 SLABS-ON-GRADE							
A4010 Standard Slabs-on-Grade		400	B-02				
A4020 Structural Slabs-on-Grade							
A4040 Pits and Bases		400	B-02				
A4090 Slab-On-Grade Supplementary Components							
A4090.10 Perimeter Insulation		400	B-02				
A4090.60 Subbase Layer		400	B-02				
A60 WATER AND GAS MITIGATION							
A6010 Building Subdrainage							
A6010.10 Foundation Drainage		400	B-02				
A6010.20 Underslab Drainage		400	B-02				
A6020 Off-Gassing Mitigation							
A90 SUBSTRUCTURE RELATED ACTIVITIES							
A9010 Substructure Excavation							
A9040 Soil Treatment							
B Shell							
B10 SUPERSTRUCTURE							
B1010 Floor Construction							
B1010.10 Floor Structural Frame		400	B-02				
B1010.20 Floor Decks, Slabs, and Toppings		400	B-02				
B1010.40 Mezzanine Floor Construction		400	B-02				
B1010.50 Ramps		400	B-02				
B1010.90 Floor Construction Supplementary Components		400	B-02				
B1020 Roof Construction							
B1020.10 Roof Structural Frame		400	B-04				
B1020.20 Roof Decks, Slabs, and Sheathing		400	B-04				
B1020.30 Canopy Construction		400	B-04				
B1020.90 Roof Construction Supplementary Components							
B1080 Stairs							
B1080.80 Ladders		400	B-04				
B20 EXTERIOR VERTICAL ENCLOSURES							
B2010 Exterior Walls							
B2010.10 Exterior Wall Veneer		400	B-03				
B2010.20 Exterior Wall Construction		400	B-03				

§ 2.4 Model Element Table

Identify (1) whether a Model Element will be modeled, (2) the LOD required for each Model Element at			Modeled	Construction Manager Construction Coordination			As-Built (TBD)		
Indicate whether the Model Element is included in the Project by inserting an “x” in the "Modeled' column. If a “Modeled” cell is left blank, the Element in that row will not be included in a Model Portion.									
Insert abbreviations for each MEA identified in the "Abbreviations" tab.									
Project Milestones headings may be modified to identify delivery milestones as defined in the Agreement.									
Contract naming listed in attachment.									
NOTE: LODs must be adapted for the unique characteristics of each Project. *All coordination is in Revizto									
Model Elements Utilizing CSI UniFormat™				LOD	MEA	Notes	LOD	MEA	Notes
	B2010.40	Fabricated Exterior Wall Assemblies		400	B-03				
	B2010.50	Parapets		400	B-03				
	B2010.60	Equipment Screens		400	B-03				
	B2010.80	Exterior Wall Supplementary Components		400	B-03				
	B2010.90	Exterior Wall Opening Supplementary Components		400	B-03				
B2020	Exterior Windows								
	B2020.10	Exterior Operating Windows		400	B-09				
	B2020.20	Exterior Fixed Windows		400	B-09				
	B2020.30	Exterior Window Wall		400	B-09				
	B2020.50	Exterior Special Function Windows							
B2050	Exterior Doors and Grilles								
	B2050.10	Exterior Entrance Doors		400	B-09				
	B2050.20	Exterior Utility Doors		400	B-09				
	B2050.30	Exterior Oversize Doors		400	B-09				
	B2050.40	Exterior Special Function Doors		400	B-09				
	B2050.60	Exterior Grilles		400	B-09				
	B2050.70	Exterior Gates		400	B-09				
	B2050.90	Exterior Door Supplementary Components		400	B-09				
B2070	Exterior Louvers and Vents								
	B2070.10	Exterior Louvers							
	B2070.50	Exterior Vents							
B2080	Exterior Wall Appurtenances								
	B2080.10	Exterior Fixed Grilles and Screens							
	B2080.30	Exterior Opening Protection Devices							
B2090	Exterior Wall Specialties								
B30	EXTERIOR HORIZONTAL ENCLOSURES								
B3010	Roofing								
	B3010.10	Steep Slope Roofing		400	B-07				
	B3010.50	Low-Slope Roofing		400	B-07				
	B3010.70	Canopy Roofing		400	B-07				
	B3010.90	Roofing Supplementary Components							
B3020	Roof Appurtenances								
	B3020.10	Roof Accessories		400	B-07				
	B3020.30	Roof Specialties		400	B-07				
	B3020.70	Rainwater Management		400	B-07				
B3040	Traffic Bearing Horizontal Enclosures								
B3060	Horizontal Openings								
	B3060.10	Roof Windows and Skylights		400	B-07				
	B3060.50	Vents and Hatches		400	B-07				
	B3060.90	Horizontal Opening Supplementary Components							
B3080	Overhead Exterior Enclosures								
	B3080.10	Exterior Ceilings		400	B-12				
	B3080.20	Exterior Soffits		400	B-12				
	B3080.30	Exterior Bulkheads							

§ 2.4 Model Element Table

Identify (1) whether a Model Element will be modeled, (2) the LOD required for each Model Element at				Modeled	Construction Manager Construction Coordination			As-Built (TBD)		
Indicate whether the Model Element is included in the Project by inserting an “x” in the "Modeled' column. If a “Modeled” cell is left blank, the Element in that row will not be included in a Model Portion.										
Insert abbreviations for each MEA identified in the "Abbreviations" tab.										
Project Milestones headings may be modified to identify delivery milestones as defined in the Agreement.										
Contract naming listed in attachment.										
NOTE: LODs must be adapted for the unique characteristics of each Project. *All coordination is in Revizto										
Model Elements Utilizing CSI UniFormat™										
C Interiors										
C10 INTERIOR CONSTRUCTION										
C1010 Interior Partitions										
C1010.10 Interior Fixed Partitions					400	B-05				
C1010.20 Interior Glazed Partitions					400	B-05				
C1010.50 Interior Operable Partitions										
C1010.70 Interior Screens										
C1010.90 Interior Partition Supplementary Components										
C1020 Interior Windows										
C1020.10 Interior Operating Windows					400	B-10				
C1020.20 Interior Fixed Windows					400	B-10				
C1030 Interior Doors										
C1030.10 Interior Swinging Doors					400	B-09				
C1030.20 Interior Entrance Doors					400	B-09				
C1030.25 Interior Sliding Doors					400	B-09				
C1030.30 Interior Folding Doors					400	B-09				
C1030.40 Interior Coiling Doors					400	B-09				
C1030.50 Interior Panel Doors					400	B-09				
C1030.70 Interior Special Function Doors					400	B-09				
C1030.80 Interior Access Doors and Panels					400	B-09				
C1030.90 Interior Door Supplementary Components					400	B-09				
C1040 Interior Grilles and Gates										
C1040.10 Interior Grilles										
C1040.50 Interior Gates										
C1060 Raised Floor Construction										
C1060.10 Access Flooring					400	B-09				
C1060.30 Platform/Stage Floors					400	B-09				
C1070 Suspended Ceiling Construction										
C1070.10 Acoustical Suspended Ceilings					300	B-12				
C1070.20 Suspended Plaster and Gypsum Board Ceilings					300	B-12				
C1070.50 Specialty Suspended Ceilings					300	B-12				
C1070.70 Special Function Suspended Ceilings					300	B-12				
C1070.90 Ceiling Suspension Components					300	B-12				
D Services										
D10 CONVEYING										
D1080 Operable Access Systems										
D1080.10 Suspended Scaffolding										
D1080.20 Rope Climbers										
D1080.30 Elevating Platforms										
D1080.40 Powered Scaffolding										
D1080.50 Building Envelope Access										
D20 PLUMBING										
D2010 Domestic Water Distribution										
D2010.10 Facility Potable-Water Storage Tanks					400	B-21				
D2010.20 Domestic Water Equipment					400	B-21				
D2010.40 Domestic Water Piping					400	B-21				

§ 2.4 Model Element Table

Identify (1) whether a Model Element will be modeled, (2) the LOD required for each Model Element at			Modeled	Construction Manager Construction Coordination			As-Built (TBD)		
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Insert abbreviations for each MEA identified in the "Abbreviations" tab.									
Project Milestones headings may be modified to identify delivery milestones as defined in the Agreement.									
Contract naming listed in attachment.									
NOTE: LODs must be adapted for the unique characteristics of each Project. *All coordination is in Revizto									
Model Elements Utilizing CSI UniFormat™				LOD	MEA	Notes	LOD	MEA	Notes
	D2010.60	Plumbing Fixtures		400	B-21				
	D2010.90	Domestic Water Distribution Supplementary Components		400	B-21				
D2020	Sanitary Drainage								
	D2020.10	Sanitary Sewerage Equipment							
	D2020.30	Sanitary Sewerage Piping							
	D2020.90	Sanitary Drainage Supplementary Components							
D2030	Building Support Plumbing Systems								
	D2030.10	Stormwater Drainage Equipment		400	B-21				
	D2030.20	Stormwater Drainage Piping		400	B-21				
	D2030.30	Facility Stormwater Drains		400	B-21				
	D2030.90	Building Support Plumbing System Supplementary Components		400	B-21				
D2050	General Service Compressed-Air								
D30	HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)								
D3020	Heating Systems								
	D3020.10	Heat Generation		400	B-22				
	D3020.30	Thermal Heat Storage		400	B-22				
	D3020.70	Decentralized Heating Equipment		400	B-22				
	D3020.90	Heating System Supplementary Components		400	B-22				
D3030	Cooling Systems								
	D3030.10	Central Cooling		400	B-22				
	D3030.30	Evaporative Air-Cooling		400	B-22				
	D3030.50	Thermal Cooling Storage		400	B-22				
	D3030.70	Decentralized Cooling		400	B-22				
	D3030.90	Cooling System Supplementary Components		400	B-22				
D3050	Facility HVAC Distribution Systems								
	D3050.10	Facility Hydronic Distribution		400	B-22				
	D3050.30	Facility Steam Distribution		400	B-22				
	D3050.50	HVAC Air Distribution		400	B-22				
	D3050.90	Facility Distribution Systems Supplementary Components		400	B-22				
D3060	Ventilation								
	D3060.10	Supply Air		400	B-22				
	D3060.20	Return Air		400	B-22				
	D3060.30	Exhaust Air		400	B-22				
	D3060.40	Outside Air		400	B-22				
	D3060.60	Air-to-Air Energy Recovery							
	D3060.70	HVAC Air Cleaning							
	D3060.90	Ventilation Supplementary Components							
D3070	Special Purpose HVAC Systems								
	D3070.10	Snow Melting							
D40	FIRE PROTECTION								
D4010	Fire Suppression								
	D4010.10	Water-Based Fire-Suppression		400	B-20				
	D4010.50	Fire-Extinguishing		400	B-20				
	D4010.90	Fire Suppression Supplementary Components		400	B-20				
D4030	Fire Protection Specialties			400	B-20				

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NOTE: LODs must be adapted for the unique characteristics of each Project. *All coordination is in Revizto									
Model Elements Utilizing CSI UniFormat™				LOD	MEA	Notes	LOD	MEA	Notes
	D4030.10	Fire Protection Cabinets		400	B-20				
	D4030.30	Fire Extinguishers		400	B-20				
	D4030.50	Breathing Air Replenishment Systems		400	B-20				
	D4030.70	Fire Extinguisher Accessories		400	B-20				
D50	ELECTRICAL								
	D5010	Facility Power Generation							
	D5010.10	Packaged Generator Assemblies		400	B-23				
	D5010.20	Battery Equipment		400	B-23				
	D5010.30	Photovoltaic Collectors		400	B-23				
	D5010.40	Fuel Cells		400	B-23				
	D5010.60	Power Filtering and Conditioning		400	B-23				
	D5010.70	Transfer Switches		400	B-23				
	D5010.90	Facility Power Generation Supplementary Components		400	B-23				
	D5020	Electrical Service and Distribution							
	D5020.10	Electrical Service		400	B-23				
	D5020.30	Power Distribution		400	B-23				
	D5020.70	Facility Grounding		400	B-23				
	D5020.90	Electrical Service and Distribution Supplementary Components		400	B-23				
	D5030	General Purpose Electrical Power							
	D5030.10	Branch Wiring System		400	B-23				
	D5030.50	Wiring Devices		400	B-23				
	D5030.90	General Purpose Electrical Power Supplementary Components		400	B-23				
	D5040	Lighting							
	D5040.10	Lighting Control		400	B-23				
	D5040.20	Branch Wiring for Lighting		400	B-23				
	D5040.50	Lighting Fixtures		400	B-23				
	D5040.90	Lighting Supplementary Components		400	B-23				
	D5080	Miscellaneous Electrical Systems							
	D5080.10	Lightning Protection		400	B-23				
	D5080.40	Cathodic Protection		400	B-23				
	D5080.70	Transient Voltage Suppression		400	B-23				
	D5080.90	Miscellaneous Electrical Systems Supplementary Components		400	B-23				
D60	COMMUNICATIONS								
	D6090	Communications Supplementary Components							
	D6090.10	Supplementary Components							
G30	LIQUID AND GAS SITE UTILITIES								
	G3010	Water Utilities							
	G3010.10	Site Domestic Water Distribution		400	B-21				
	G3010.30	Site Fire Protection Water Distribution		400	B-21				
	G3010.50	Site Irrigation Water Distribution		400	B-21				
	G3020	Sanitary Sewerage Utilities							
	G3020.10	Sanitary Sewerage Utility Connection		400	B-21				
	G3020.20	Sanitary Sewerage Piping		400	B-21				
	G3020.40	Utility Septic Tanks		400	B-21				
	G3020.50	Sanitary Sewerage Structures		400	B-21				

§ 2.4 Model Element Table

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Contract naming listed in attachment.							
NOTE: LODs must be adapted for the unique characteristics of each Project. *All coordination is in Revizto							
Model Elements Utilizing CSI UniFormat™		LOD	MEA	Notes	LOD	MEA	Notes
G3020.60 Sanitary Sewerage Lagoons		400	B-21				
G3030 Storm Drainage Utilities							
G3030.10 Storm Drainage Utility Connection		400	B-21				
G3030.20 Storm Drainage Piping		400	B-21				
G3030.30 Culverts		400	B-21				
G3030.40 Site Storm Water Drains		400	B-21				
G3030.50 Storm Drainage Pumps		400	B-21				
G3030.60 Site Subdrainage		400	B-21				
G3030.70 Storm Drainage Ponds and Reservoirs		400	B-21				
G3060 Site Fuel Distribution							
G3060.40 Site Diesel Fuel Distribution							
G3060.60 Site Aviation Fuel Distribution							
G3090 Liquid and Gas Site Utilities Supplementary Components							
G3090.10 Supplementary Components							
G40 ELECTRICAL SITE IMPROVEMENTS							
G4010 Site Electric Distribution Systems							
G4010.10 Electrical Utility Services		400	B-23				
G4010.20 Electric Transmission and Distribution		400	B-23				
G4010.30 Electrical Substations		400	B-23				
G4010.40 Electrical Transformers		400	B-23				
G4010.50 Electrical Switchgear and Protection Devices		400	B-23				
G4010.70 Site Grounding		400	B-23				
G4010.90 Electrical Distribution System Instrumentation and Controls		400	B-23				
G4050 Site Lighting							
G4050.10 Area Lighting		400	B-23				
G4050.20 Flood Lighting		400	B-23				
G4050.50 Building Illumination		400	B-23				
G4050.90 Exterior Lighting Supplementary Components		400	B-23				
G50 SITE COMMUNICATIONS							
G5010 Site Communications Systems							
G5010.10 Site Communications Structures		400	B-23				
G5010.30 Site Communications Distribution		400	B-23				
G5010.50 Wireless Communications Distribution		400	B-23				

§ 2.2 Abbreviations

§ 2.2 Abbreviations for each Model Element Author to be used in the Model Element Table are as follows:

(Provide abbreviations for each Model Element Author)

Abbreviation Model Element Author (MEA)

City	City of Harrington
HPL	Harrington Public Library
AMP	AMP Consultants
BMG	Becker Morgan Group
BIA	Baker, Ingram & Assoc
CMTA	CMTA
B-1	Landscaping
B-2	Concrete
B-3	Masonry
B-4	Structural Steel & Miscellaneous Metals
B-5	Exterior Structural Stud Assembly, Metal Framing, and Drywall
B-6	Carpentry and General Works
B-7	Roofing
B-8	Exterior & Interior Panels
B-9	Hollow Metal Doors, Frames, and Finish Hardware
B-10	Glass and Glazing
B-11	Ceramic Tile
B-12	Acoustical Ceilings
B-13	Paint and VWC
B-14	Flooring
B-15	Caulking
B-16	Specialties
B-17	Operable Partition
B-18	Window Shades
B-19	Millwork & Casework
B-20	Fire Protection
B-21	Plumbing
B-22	Mechanical
B-23	Electrical
B-24	Structured Cabling

§ 2.3 Notes

§ 2.3 Model Element Table Notes

Notes:

(List by number shown on table.)

- 1 Model Element Table is an add on document to all bid package noted above and relating to all contractor's scope of work. The table identifies all bid package requirements to provide Building Information Models (BIM) during the BIM coordination process. In addition, refer to BIM protocol instruction to see LOD descriptions.
- 2 Contractors are required to attend coordination meetings, submit, and post to BuildingBlok and maintain the BIM schedule production process.

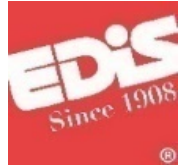


Harrington Public Library
Bid Package B
Project Building Information Modeling (BIM)
Scope Participant List July 31, 2023

Contracts:

- B-1 Landscaping
- B-2 Concrete
- B-3 Masonry
- B-4 Structural Steel & Miscellaneous Metals
- B-5 Exterior Structural Stud Assembly, Metal Framing, and Drywall
- B-6 Carpentry and General Works
- B-7 Roofing
- B-8 Exterior & Interior Panels
- B-9 Hollow Metal Doors, Frames, and Finish Hardware
- B-10 Glass and Glazing
- B-11 Ceramic Tile
- B-12 Acoustical Ceilings
- B-13 Paint and VWC
- B-14 Flooring
- B-15 Caulking
- B-16 Specialties
- B-17 Operable Partition
- B-18 Window Shades
- B-19 Millwork & Casework
- B-20 Fire Protection
- B-21 Plumbing
- B-22 Mechanical
- B-23 Electrical
- B-24 Structured Cabling





Bid Pack B RFI Log
As of 8/02/2023

RFI #	Date Received	Category	Drawing #	Contractor	Question	Response	Addendum No.
1	7/14/2023	Plumbing	P300		FD-1 FD-2 - Specify trap primer, however basis of design does not indicate trap primer, we intend to price trap guards	The basis of design indicates trap primer or trap guard; the trap guard alternate is acceptable.	3
2	7/18/2023	Flooring		Connolly	After looking at the drawings, finish schedule shows tile on all walls of the bathrooms and the detail just shows the wet wall. Which is correct? If just wet walls, would the other walls receive ceramic base?	See Specification 012300 for Add Alternate B-4 narrative. Note, RM 135 should also be included within this narrative. For Base Bid, CWT wall base will be CWT-1. Updated specification and drawings will be included in forthcoming addendum.	3
3	7/18/2023	Flooring		Connolly	There is a BK2 shown on the details for thin brick but no selection, is there a selection?	Refer to Section 042000/2.6 for product information.	3
4	7/18/2023	Flooring		Connolly	Is there a selection for the type of transition from carpet tile to concrete?	Johnsonite Slim Line Transition or similar product by another manufacturer.	3
5	7/19/2023	Concrete		JT Hoover	I received the update that specs have been uploaded. There was nothing for cast in place concrete so we will proceed with the notes on the structural plans.	Will be sent out with Add No 1	1
6	7/19/2023	Concrete		JT Hoover	Is it acceptable to bid poured walls in place of the CMU block shown at the foundations?	Alternative designs can be discussed with selected bidder, but due to bidding schedule, bids shall be based on current design.	3
7	7/19/2023	Concrete		JT Hoover	Would the design team be amenable to a full height wall (to top of slab) with 4" wide slab ledge in place off the turned down edge as shown? (see my quick drawing below). Otherwise we would omit the insulation not wanting that 8" above the wall to be free and susceptible to damage by others. We would only want to include the insulation in our scope from top of footing to top of wall.	Alternative designs can be discussed with selected bidder, but due to bidding schedule, bids shall be based on current design.	3
8	7/19/2023	Concrete		JT Hoover	Can you figure pad footings with piers in place of the sonotubes? There are areas where these are required quite close to the perimeter foundation. With our aluminum form system, the would have to be incorporated together.	Reference Addendum 3 for revised pier design.	3
9	7/19/2023	Concrete		JT Hoover	At the wall sections with the grouted cavity and brick veneer, we can offer a thicker wall base at these locations and form a brick ledge on the exterior side of the wall. Otherwise we would have to omit everything outside of our insulation.	Alternative designs can be discussed with selected bidder, but due to bidding schedule, bids shall be based on current design.	3
10	7/20/2023	IT		Ctrl-Alt-Repair	On the IT side are we providing the wireless access points (WAP's) / managed switches / rack etc, or does the owner provide those materials and we just run the cabling?	Per Delaware Division of Libraries (DDL) - see below for responsibilities: 1) WAPS: a) Furnish: by DDL b) Install: by Contract B-24 2) Switches & UPS': a) Furnish & Install: by DDL 3) Racks: a) Furnish & Install: by Contract B-24	4
11	7/20/2023	Metal Framing & Drywall		Brandywine Contractors	Is a bid bond required?	Bid Bond not required	2
12	7/20/2023	Metal Framing & Drywall		Brandywine Contractors	Bid form lists City of Harrington Contractors License as an attachment, Is this a requirement for bid submission or only if awarded?	Only if awarded	2
13	7/20/2023	Metal Framing & Drywall		Brandywine Contractors	Will a project schedule be published?	Yes, project schedule will be published as part of Addendum 2	2
14	7/21/2023	Caulking		J&B Caulkers	Contract B-15 owns caulking of the bottom of the interior aluminum frames to vinyl flooring. Which contract owns caulking the remaining three sides of the interior aluminum frames?	Caulking of the remaining three sides of the interior aluminum frames are under the glass and glazing contract.	2
15	7/21/2023	Caulking		J&B Caulkers	Will caulking at the bottom of the hm frames to vinyl flooring be required and if so by which contract?	There are no vinyl floors, only sealed concrete and polished concrete floors. Contractor will be responsible for HM frames at these locations. Scopes of work will be updated to reflect this. This will be by the caulking contract.	2
16	7/21/2023	Flooring		Creative Flooring	Specific scope of work for contract B-14 – Flooring shows sealed concrete by others, but polished concrete is included. Can polished concrete be separated out?	Polished concrete will be included as part of the flooring contract, however will be included as an Owner's Allowance. The dollar value to be decided and included as a future addendum.	2
17	7/21/2023	Flooring		Creative Flooring	The sample insurance certificate shows Pollution Liability and Professional Liability requirements. We do not carry these coverages as they typically do not pertain to floor covering installation. Can this requirement be waived for this contract?	EDiS has provided a matrix as part of Addendum 2 for which contracts will require pollution insurance and professional liability insurance.	2

18	7/21/2023	Steel		RC Fab	Looking at the scope items for the B-4 Structural Steel & Miscellaneous Metals contract.... Can you confirm that the Scope Item #17, Provide metal-web wood joists, is correct?	See area between column lines A and D and 3 and 10 where it specifies Red-H Wood Truss.	2
19	7/24/2023	Mechanical		Diamond Mechanical	For duct work on this job are you looking for snaplock or spiral duct?	Concealed branch ductwork may be either snaplock or spiral. All exposed ductwork in occupied areas shall be dual wall spiral as indicated in the documents.	3
20	7/18/2023	General		Enterprise Masonry	Do prevailing wage rates apply, or is this funded by the Town of Harrington? ITB says “where prevailing wages apply.”	This project is prevailing wage.	2
21	7/20/2023	Electrical		Nickle	Specifications state that all circuits should be run in conduit. Is armored cable acceptable in concealed areas?	Armored cable shall be allowed in concealed areas.	3
22	7/20/2023	Electrical	E-300	Nickle	Note F on Drawing E-300 states that Fire Alarm wiring must be FA MC in concealed areas. Is FPLP acceptable in concealed areas?	FPLP is not acceptable.	3
23	7/20/2023	Electrical		Nickle	It appears that the Mechanical Contractor provides the Ceiling Fans (HVLS-1, HVLS-2, HVLS-3, and HVLS-4). Does the Electrical Contractor furnish and install fan controls or install only? Please provide part number or details on control.	Mechanical contractor to furnish fans, electrical contractor installs fan and pathways for controls. Mechanical contractor to install controls.	3
24	7/20/2023	Electrical		Nickle	Who is to furnish cable tray?	Structured cabling contractor is furnishing and installing cable tray.	2
25	7/20/2023	Electrical		Nickle	No provisions for a future site sign are shown on the panel schedules, site drawing, or IT drawings. Please provide clarification.	Conduit shall be provided to sign location under base bid. Wiring to be provided as alternate. See drawing addendum.	3
26	7/20/2023	Electrical		Nickle	Scope item 35 refers to millwork and casework lighting. The Fry Reglet part number (DRMZ) on the Architectural details appears to be the molding/casework itself. Are we to furnish and install Fry Reglet lighting? Install only? Please provide part number and clarification.	Light Fixture schedule revised with part number. See Addendum 3.	3
27	7/18/2023	Masonry		Enterprise Masonry	do prevailing wage rates apply, or is this funded by the Town of Harrington? ITB says “where prevailing wages apply.	Prevailing wage rates do apply.	2
28	7/24/2023	Fire Protection		Oliver	It states to provide a full fire alarm system, but there are no specs given what kind of system they want or any other specific details. Please provide	Specification for Fire Alarm will be included in Addendum 3.	3
29	7/24/2023	Electrical		Nickle	Does Bid Pack A or Bid Pack B own the underground conduit the primary electrical service, site signage, and telecom? The Civil drawings from Bid Pack A show these items “for reference only”, but the Electrical Bid Pack B drawings do not show them as our responsibility.	THIS RESONSE HAS BEEN UPDATED FROM ADDENDUM 2. Bid Package B under the electrical contract. Delaware COOP owns from pole to transformer. Electrical contractor owns from transformer to building, underground telecom conduits, and electrical service for site signage. CMTA comments: •Primary Wire provided by UTILITY •Service transformer provided by UTILITY •Service transformer pad provided by CUSTOMER •Secondary conduit provided by CUSTOMER •Secondary wire to CT + Meter provided by UTILITY •CT + Meter pan provided by CUSTOMER oCT + Meter on line side of service disconnect oOn building exterior next to service transformer •Conduit + Wire downstream of meter provided by CUSTOMER •Service Disconnect provided by CUSTOMER oOn building exterior next to service transformer	3
30	7/24/2023	Electrical		Nickle	Please provide specifications for the fire alarm system.	Specification for Fire Alarm will be included in Addendum 3.	3
31	7/24/2023	Steel		R.C. Fabricators (RedBuilt)	Please provide Net thickness of the decking on the trusses	Wood decking is 3" (2 1/2" actual)	3
32	7/24/2023	Steel		R.C. Fabricators (RedBuilt)	Please provide Attachment of the C5 channel to our trusses. RedBuilt has details in our manual (attached), but the detail on sheet S202 will not work as the 5/8" is too large to drill in our truss chords	Reduce bolts to 3/8" dia spaced at 10"	3
33	7/24/2023	Steel		R.C. Fabricators (RedBuilt)	Please provide live and dead loads along with any mech loading that would be in addition.	LL: 150 plf / DL: 100 plf MECH/Lighting: Add'l 50 plf	3
34	7/24/2023	Metal Framing & Drywall		Brandywine Contractors	B-5 metal framing scope mentions expansion control. I do not see any expansion joint within the interior of the building that would require expansion joint covers. Please confirm.	No expansion joint covers are required.	3
35	7/24/2023			Brandywine Contractors	Who is responsible for section 113013 residential appliances as I do not see this listed in anyone’s package?	Furnishing of residential appliances will be direct purchased by EDIS.	2
37	7/24/2023	Carpentry		Brandywine Contractors	B-16 Specialties is to furnish specified items to B-6 Carpentry for installation however nothing is mentioned for 101463 Electronic Message System. Should we assume B-16 Specialties would supply and install this item?	Correct, Contract B-16 would supply and install this item.	3
39	7/24/2023	Carpentry		Brandywine Contractors	B-6 Carpentry scope of work has B-6 to install and B-16 to furnish projection screens however there are no specifications on projection screens	Refer to the Audiovisual Equipment Schedule on drawing T-200.	3

40	7/24/2023	Carpentry		Brandywine Contractors	B-6 Carpentry scope of work mentions wall and corner guards however we see neither on the project and there are no specifications for this material	No corner guards are required. However, see Sections 092900/2.6/A, 092900/2.6/B, and 092900/3.6/C regarding special corner and edge trim requirements.	3
41	7/24/2023			Brandywine Contractors	Is fencing type 1 & 1A to be a custom built application or what is the architects intent? Please clarify what is meant by 1 x 6 vertically engineered wood.	Fence Types 1 and 1A are custom built. For information regarding the siding material, see Specification 012300 for ADD Alternates B-1B and B-1C narratives and Specifications 074623 Alternate B-1b and 074623 Alternate B-1c for Base Bid and Alternate materials.	3
42	7/24/2023	Steel		RC Fabricators	Please confirm that Contract # B-4 will provide the steel for the operable partition in base bid, even through it is and add alternate for Contract #B-17.	Confirmed.	3
43	7/24/2023	Steel		RC Fabricators	Please provide Kicker connection and loading for angle kicker at each hanger for operable partition, Detail 4/S303.	Connection and kicker load needs to be coordinated with selected partition info	3
44	7/24/2023	Steel		RC Fabricators	Please provide additional details for 1" rod called out on S103.	Reference Addendum 3 S203 for rod details	3
45	7/24/2023	Steel		RC Fabricators	Can design team provide a drawing locating Exposed Structural steel	Exposed Areas can be determined by reviewing the reflected ceiling plans, interior elevations, and building sections.	3
46	7/24/2023	Steel		RC Fabricators	Please provide structural details for roof screen.	Reference Addendum 3 12/S301 for HSS support framing @ roof screens	3
46.1	7/24/2023	Steel		RC Fabricators	Please confirm which contract the roof screen is in.	Roof screen is in B-08 - Exterior and Interior Panels. Structural and Misc Steel Contract is required to provide vertical supports detailed on 12/S301.	3
47	7/25/2023	Masonry		D. Gingerich Concrete & Masonry Inc.	Would Hohmann & Barnard X-Seal anchors be acceptable in lieu of the Hohmann & Barnard HB-213?	The HB-213 is specified since it requires significantly shorter fasteners to reach the stud framing. Additionally, the possibility of the installer missing the stud framing is reduced when using the HB-213 since it is installed before the rigid insulation is applied.	3
48	7/25/2023	Concrete		Cavan	Checking on the scope of work Contract NO B-2 – Concrete, note #2. Layout. Will there be any control points provided or do we have to provide those ourselves?	"The Construction Manager will establish a bench mark and base line control from which structures and grades shall be laid out by Subcontractors as designated in this section. The total extent of this layout is shown on the site drawings. One bench elevation shall be provided."	2
49	7/25/2023	Flooring		Creative Flooring	Please clarify correct product for CPT2 – Finish Legend shows Color Anchor, however specifications state Ruffian I	Specification is correct. CPT-3 will be renamed to CPT-2 in Finish Schedule. Updated drawing will be included in forthcoming Addendum.	3
50	7/25/2023	Roofing		Quality Exteriors Inc.	Please submit the attached Fabral Power Seam data for a Metal Roof Panel substitution request. https://www.dropbox.com/scl/fi/0wndfg2hmjle2ad012npr/Quality-Exteriors-Substitution-RFI.pdf?rlkey=jd1tyaj9mxiecigv155q3pn5s&dl=0	Substitution is acceptable.	3
51	7/25/2023	Plumbing and Mechanical		Zimmer	would you kindly consider combining those two contracts (plumbing and mechanical) into one cumulative package to allow those of us who so choose to bid a combination of both and optimize our fixed costs?	If the bids come back where it makes sense to combine the contracts, we will do so, however want to allow bidders who may only do one or the other bid on this project as well. In this case, please provide separate bids for both, however, if warranted, offer a voluntary deduct alternate to perform both scopes of work.	3
52	7/26/2023	Window Shades		Goodwin Brothers	The RCP (A104) indicates RS-3 (motorized shades) only at the upper windows of Large Conference 103; however, the electrical drawings (E-100) indicate motorized shades at all the locations indicated on the RCP (A104) with RS-1, RS-2, & RS-3. Per the specifications, RS-1 & RS-2 are to be manual shades. Could you please confirm that the only motorized shades are RS-3 which are to be located at the upper windows of Large Conference 103?	Confirmed that only RS-3 are to be powered motorized shades. All other locations shall be manual shades. Updated drawings will be included in forthcoming addendum.	3
53	7/26/2023			TJLane	In the spec book section 123213-3 Part 2-Products it states there are a list of approved manufactures. Could this be waived and allow for us to fabricate ourselves?	Yes, it is acceptable to shop fabricate.	3
54	7/26/2023	Flooring		Connolly	After looking at the drawings, finish schedule shows tile on all walls of the bathrooms and the detail just shows the wet wall. Which is correct? If just wet walls, would the other walls receive ceramic base?	See question 2 above	3
56	7/26/2023	Flooring		Connolly	Do we have to carry the polished concrete?	Our plan for this is to work with our estimating department to carry an Owner's Allowance for this scope of work which we will have in the flooring contract. This will allow us to still to have the monetary coverage, however will not require the flooring contractors to bid out the polished concrete.	3
57	7/26/2023	Mechanical		DegliObizzi	Is it acceptable to install PVC pipe and fittings for the condensate pipe in the building and on the roof.	Yes.	3
58	7/26/2023	Mechanical		DegliObizzi	Is PVC pipe acceptable to use for the underground sanitary and storm pipe?	No, the project does not call for PVC piping below grade for sanitary or storm systems.	3

59	7/26/2023	Mechanical		DegliObizzi	Is PVC pipe acceptable to use for the above ground sanitary and storm pipe?	No, the project does not call for PVC piping below grade for sanitary or storm systems.	3
60	7/26/2023	Plumbing		DegliObizzi	BFP-1 is on the plumbing schedule, should this be carried by the fire protection contractor?	See scope of work for plumbing and fire protection. BFP for fire service is by fire protection contractor.	3
61	7/26/2023	Plumbing		DegliObizzi	Please clarify the plumbing portion of Alternate B3. The base bid drawings show the 3/4" gas to the fire place. Should that be broken out and provided as alternate B3? Who provides the gas fireplace?	3/4" gas line shall be part of the alternate. See Bid Addendum 3.	3
62	7/26/2023	Plumbing		DegliObizzi	Is this project considered Kent County or Sussex County?	Kent County	3
63	7/26/2023	Plumbing		DegliObizzi	Is there a 2 year warranty on this project?	Yes, 2 year warranty	3
64	7/26/2023	Painting		EDIS	Are LEED submittals required for this project?	No	3
65	7/26/2023	Painting		Jamestown	Can we get some clarification on the substrates for the exterior of the building? - Vertical Engineered Wood Siding is noted on several elevations. Is this the primed Fiber Cement Siding listed in the specs?	See Specification 012300 for ADD Alternates B-1A, B-1B, and B-1C narratives and Specifications 074646.10, 074623 Alternate B-1b, and 074623 Alternate B-1c for Base Bid and Alternate materials.	3
66	7/26/2023	Painting		Jamestown	Please confirm that the 'Painted Aluminum Frames' noted in our scope and drawings are in fact painted in the field by the painting contractor. Spec section 084113 notes the finish to be 'High-Performance Organic'. It's not typical to field paint aluminum.	Shop painting is acceptable since the Painted Aluminum Frames are designed to be installed as a single unit.	3
67	7/26/2023	Painting		Jamestown	Are the Alternates listed on our bid form for contract B-13 correct and the only alternates we are to price? I'm not sure the Harrington Room Features involves painting? Also it seems that others listed in spec section 012300 Alternates do involve painting...Examples B-1a, B-1b, & B-1c. The base bid is painted siding. The add alternate is for either phenolic panels or engineered wood siding which if I'm not mistaken are both factory finished. Wouldn't there be a deduct alternate for paint?	Harrington Room and exterior panels would be a deduct alternate to the painting scope because other finishes would take place in lieu of painting.	3
68	7/26/2023	Painting		Jamestown	Gas piping is listed to be painted in our scope. Where is this shown?	Please reference plumbing drawings.	3
69	7/26/2023			Brandywine Contractors	What is the dollar amount of coverage required for Professional Liability and Pollution Insurance?	See sample insurance form.	3
70	7/26/2023	Mechanical		DegliObizzi	How much space will be needed to heat during the project? How many heaters should be installed? Can the temp heat be an allowance cost for Contract B-22?	Temporary heaters shall be included as part of the base-bid. Refer to specification section 015123. Bidders should work with vendor(s) and assume all 15,000 SF of the building will need to be heated. Fuel for temporary heaters will be paid for by the Construction Manager under the allocation set forth in Contract B-22.	3
71	7/26/2023	Mechanical		DegliObizzi	The pip leaving the mechanical room is labeled CWS/R, should this be dual temp piping? If so, please provide a dual temp pipe spec.	CWS/R is condenser water supply/return. There is no dual temp piping specified.	3
72	7/26/2023	Security Cables		Assurance Media	As the Delaware Div of Libraries is referenced and the project is also stated to be a Delaware Prevailing Wage Rate project. Is this new Harrington Library to be a State of Delaware owned or managed facility?	The library is owned and managed by the City of Harrington.	3
73	7/26/2023	Security Cables		Assurance Media	The State of Delaware requires that their owned or managed facilities have their Structured Communications Cabling installed by an Approved Cabling Vendor with the State of Delaware Cabling Contract GSS21441-DATA_CBL and the System installed be compliant with the State of Delaware DTI Structured Cabling System Standards and Specifications for State Managed Facilities. Do these State of Delaware requirements apply to this project? The cabling Standard referenced can be found at: https://webfiles.dti.delaware.gov/pdfs/pp/CablingAndWiringStandard.pdf	This is a question for Delaware Division of Libraries or the Owner	3
74	7/26/2023	Security Cables		Assurance Media	Is the owner or others providing the WAPS, switches, and network electronics? Drawings indicate WAPs are OFCI. If products exist in #14 of the Scope Summary that this contractor is to supply, please provide specific quantity, manufacturer, and model number for each component.	Per Delaware Division of Libraries (DDL) - see below for responsibilities: 1) WAPS: a) Furnish: by DDL b) Install: by Contract B-24 2) Switches & UPS': a) Furnish & Install: by DDL 3) Racks: a) Furnish & Install: by Contract B-24	4
75	7/26/2023	Security Cables		Assurance Media	It is my understanding that the project is applicable for State of Delaware Prevailing Wage Rates and that BP2 Contract B-24 Structured Cabling includes Div 27 & Div 28 – covering Structured Cabling, Audio/Video, and Security Access Control. Also, the Contract B-24 Bid Form does not show any alternates being applicable. Please clarify scope requirement #15. Section 275300 states contractor to furnish complete system. Is the AV system not to be at prevailing wage rate, or are we to show an alternate price for the AV portion not based on prevailing wage rates?	If AV equipment is furnished under Contract B-24, it will be by prevailing wage. This is will be reflected in Addendum 4. A voluntary alternate has been added to the bid form for Contract B-24.	3
76	7/26/2023	Security Cables		Assurance Media	Please provide Drawing Number that shows the work described in Scope point #19 that is required to be completed by B-24 contractor and/or provide further clarification etc...	See specification section 122413 and Architectural drawings A102 and A-104 for locations of shades.	3
77	7/26/2023	Security Cables		Assurance Media	Please Clarify WAP outlets – Drawings indicate one category 6 cable and written spec states two category 6A.	Detail has been modified to indicate cat6a patch. 2 cat6a shall be pulled to junction box for future proofing purposes. Only one will be connected to WAP at this time	3

78	7/26/2023	Security Cables	T100/ T103	Assurance Media	The Rack Symbols shown on T100 do not match the symbols for racks in the MDF detail on drawing T103. Please clarify total quantity of two post racks, four post racks, and any cabinets.	Symbol changed on legend to reflect plans. 2 data racks shall be Ortonics MightyMo	3
79	7/26/2023	Security Cables	T104	Assurance Media	Incoming Service Provider may install their new service directly into the equipment rack. If B-24 contractor it to provide fiber optic cabling from wall to rack please clarify type of fiber and number of strands.	Crown Castle will be providing internet service. The Crown Castle NID will be located in the vertical rack. Crown Castle will be connecting fiber from the wall to NID in the vertical rack.	4
80	7/26/2023	Security Cables	T103 Detail 2&3	Assurance Media	Will the electrical contractor be providing the main TGBB with main ground conductor in the MDF and then the B-24 contractor grounding all tray and racks to TGBB?	Electrical Contractor shall provide all grounding.	3
81	7/26/2023	Security Cables		Assurance Media	It states electrical to be doing conduit work. Will electrical contractor be providing all conduit pathways for low voltage systems in all areas other than drop ceiling areas?	Yes, Electrical Contractor shall provide all pathways, refer to AV equipment schedule for EC rough in requirements	3
83	7/27/2023		A105 Vest. A102	EDiS	What is the community information board?	This a custom plastic laminate on plywood-framed tackboard with lockable glass doors.	3
84	7/27/2023			EDiS	In Large Conference Room 103, SF-7, SF-8, and SF-9 are shown on the exterior walls. This exterior wall is detailed on 4/A302. Per this detail, there is the aforementioned storefront with a beam over top. The storefront per A-602 is 2'-0" tall. Per E-200 and T-101, there are both power and data outlets shown at normal height (18" AFF) at these storefront locations. Please advise if the outlets are properly shown or if adjustments need to be made to account for the storefront. If outlets are shown properly, please provide details on how to mount outlets at the glass.	The outlets shall move to an elevation above the windows. Updated drawings will be included in a forthcoming Addendum.	3
85	7/27/2023			Penn Lighting	Could you please submit a substitution request for the light fixture types listed below? Type U1 and site lighting types L1, L2, L3, L4, L5 and L6. These are the only fixture types on the project that currently do not have specific manufacturers listed for equivalents	Substitutions provided by Penn Lighting representative are acceptable.	3
86	7/27/2023	Security Cables		Advantech	The door hardware schedule states for Hardware Set #01 "Coordinate wiring and installation with GC / EC / Owner's Security Vendor. Will division 28 be direct with customer's security vendor?	Wiring for this hardware set shall be by contract B-24.	3
87	7/27/2023	Security Cables		Advantech	I did not see any card readers on the drawings or in the door hardware schedule. What will the Galaxy Access Control system be controlling?	There are no card readers on this property, Galaxy specification is not required.	3
88	7/27/2023	Security Cables		Advantech	Are we to provide the Network Video Recorder/Server? If yes: How many days retention will be required? What frame rate should the cameras be set to?	Yes, store recordings for 30 days. Video level shall be "best" at H.265. Cameras shall be 10FPS and to record a continuous low resolution sptream at provided FPS and switch to high resolution upon motion detection.	3
89	7/27/2023	Security Cables		Advantech	The Access Control spec mentions "VMS integration with Hanwha WAVE video product line(s) or approved alternate brands". The WAVE VMS system does not meet the VMS spec "The VMS will not require any licenses to increase the number of supported devices, users, or servers" amongst some other points. Is there a different VMS we should use as a Basis of Design? Or should we include the maximum number of licenses the WAVE VMS will support (128)?	There is no access control on this project, access control specification is not required.	3
90	7/27/2023	Security Cables		Advantech	Is there a Fire Alarm specification or just the General Notes?	Fire Alarm Specification will be included with Addendum 3	3
91	7/27/2023	Security Cables		Advantech	Is there a preferred Fire Alarm manufacturer that should be used?	There is no preferred fire alarm manufacturer that should be used. Bidders are open to use any manufacturer so long as the equipment meets the standards listed in the specifications issued with Addendum 3.	4
92	7/27/2023	Security Cables		Advantech	Is the Fire Alarm system a voice evacuation system?	Yes.	3
93	7/27/2023	Security Cables		Advantech	Is cellular communication the preferred communication path for the system?	Yes.	3
94	7/27/2023	Security Cables		Advantech	Should monitoring and inspections be included with the bid? Or sent to the customer after award?	Refer to specification provided under Addendum 3. Section 284600-3.08 Maintenance Service.	3
95	7/27/2023	Concrete		Cavan	In Volume 1 Section 000115 List of Drawings the issue date for the Architecturals and Structural Plans are dated 7/17/23 but the plans that are available are dated 7/14/23 is there later plans available dated 7/17/23?	Current Architectural drawings are 7/17/23 and Structural are 7/14/23.	3
96	7/27/2023	Metal Framing & Drywall		Master Interiors	In the 092900 Drywall spec (attached), they call for a level 5 finish in the corridors & lobbies. As this is more than a typical level 4, can you confirm this is what the Library wants for these areas?	Level 5 is required at Gallery 102 only. All other areas can be Level 4.	3
97	7/27/2023	Flooring	A401	Old World Tile	Reference elevation 4 on sheet A401 and the ceramic tile bid form spec section 004100-1. Alternate B4 does not affect toilet room 135. Can you please confirm toilet room 135 is to receive wall tile on all walls floor to ceiling as shown on elevation 4 sheet A401?	RM 135 will receive floor to ceiling tile on wet wall only. Remaining walls will be CWT base only.	3
98	7/27/2023	Flooring	A105	Old World Tile	Reference alternate B4 and the finish schedule on sheet A105. What is the base detail at the restroom's base bid? We understand wall tile on all walls is part of alternate B4.	CWT wall base is required for base bid. Product will be CWT-1. Note, RM 135 is not part of ADD Alternate B-4 and will receive floor to ceiling tile on wet wall only.	3

99	7/27/2023	Flooring	Scope	Old World Tile	Reference the ceramic tile and flooring contract scope of work. The scopes of work are asking for patching and leveling. At this time it is not possible to quantify the amount of patching and leveling that will be required for this project. This project has new concrete so we assume minor prep work will be required. We will assume all required substrate repair work will be one on a T&M basis or on a change order. Please confirm this is acceptable?	Bidders will be responsible for all patching and leveling necessary for concrete floors within concrete tolerances . If concrete floors are outside of tolerance or an area has extensive damage that is deemed to be outside of concrete tolerances and is agreed to prior to placement of flooring, the Contractor would be compensated for this on either T&M or on a change order.	3
100	7/27/2023	Flooring	Scope	Old World Tile	Reference the ceramic tile scope of work. Line item 8 is asking for caulking or grouting to dissimilar material. Our grout and caulking material is non paintable and is made to be only applied to tile. For this reason, caulking to dissimilar material such as ceiling tile is done by others. Can line item 8 be removed from the scope of work?	Ceramic tile contractor owns caulking or grouting of their materials to dissimilar materials. Grout or caulk materials would be to match approved grout color and would not be expected to be painted.	3
101	7/27/2023	Flooring		Old World Tile	Is Full coverage waterproofing or crack isolation required for the floor tile installation?	Crack isolation is required for all floor tile installations.	3
102	7/27/2023	Flooring		Old World Tile	Please confirm epoxy grout is required for the floor tile installation in room 135?	Yes, epoxy grout is required.	3
103	7/27/2023	Flooring		Old World Tile	Reference spec section 093013-3 Part 2.3.1. The spec states that PFT-1 should be "Aphelion Collection; Aurora or a comparable product by the following; a. American Marazzi Tile, In. b. Best Tile c. Daltile". Can you please confirm only that the basis of design material will be acceptable and any "comparable products" need to be approved prior to the bid date? We have concerns about bidders bidding with non approved material based on the wording of the spec.	Only Basis of Design material is acceptable unless an alternate is presented before and approved prior to bid date.	3
104	7/27/2023	Flooring		Old World Tile	Please reference spec sections 096513 and 096813. Both of these spec states that the basis of design material should be provided or a comparable product should be provided by a listed manufacturer. Please confirm all non basis of design material must be approved prior to the bid date? The spec leaves room for bidders to bid the work using non approved material.	Only Basis of Design material is acceptable unless an alternate is presented before and approved prior to bid date.	3
105	7/27/2023	Mechanical		DegliObizzi	Please provide a coil piping detail for DOAS-1	This will be included with Addendum 3.	3
106	7/27/2023	Mechanical		DegliObizzi	Please provide a cooling tower pad detail	Refer to structural drawings - detail will be included with Addendum 3	3
107	7/27/2023	Landscaping		Denison Landscaping	What is the extent of lawn area? Should we include seed or sod? Is there a plan which shows the LOD?	Lawn areas are included in the sitework contract A-01, not the landscape contract B-01. LOD is shown on C-501 and C-502.	4
108	7/31/2023	Steel	S202	R.C. Fabricators	Please confirm that in Addendum #3 that the Design team wants Stainless Steel Angles at detail 15/S202. As there is a substantial price increase from galvanized steel.	Yes. Stainless steel is preferred in this location because of its lower thermal conductivity.	4
109	7/31/2023	Fire Protection		H&A Electric	Please provide specification for fire pump. There are no details showing a fire pump or any electrical for fire pump. It is EDiS recommendation to still solicit costs for the fire pump.	A fire pump is no longer required.	4
110	7/31/2023	General	GEN	Cavan	We are currently bidding the Harrington Public Library project with you. There is a requirement in the General Comments – section 9 Item A that indicates Bonding requirements for Non Resident Subcontractors. We do have a satellite office in Seaford DE, but we are a PA based entity and we wanted to clarify if we would need to have surety or cash bond for the Division of Revenue for 6 percent of the total contract.	This requirement is for when bid bonds are required. Since bid bonds are not required for this project, the 6% bond noted in the specification is not required. Payment and performance bonds may be required as determined by EDiS after bidding and should be provided as noted on the bid form. The P&P bond should not be included as part of the base-bid.	4
111	8/1/2023	Electrical		H&A Electric	Addendum #3 shows a type "B1" on the revised fixture schedule. We do not see any "B1" fixtures on the plans. Please advise of the "B1" locations	Fixture B1 is located along the east wall of Circulation, 114	4
112	8/1/2023	Electrical		H&A Electric	Drawing E-400 site lighting shows the light poles in the middle of the road. Please advise	We assume you are referring to the L6 fixtures. These are catenary fixtures which are mounted to cables (denoted with the dashed lines) to poles. Product information for the poles will be included in forthcoming addendum.	4
113	8/1/2023	Electrical		H&A Electric	Addendum #3 -bid form add/deduct alternates do not match with what the drawing notes are calling out as alternates. Please advise	B-23 bid form includes the following alternates: Alt #A1 - Flagpole Alt #B3 - Harrington Room Features Alt #B5 - Site Sign Alt #B6 - Fire Pump - This will no longer be an alternate per the RFI response below. Per Addendum 3 and the RFI responses below, the cover lighting noted for the Harrington room is to be included in Alt #B3. The motorized shade alternate noted was a mistake by the design team, is not an alternate, and is to be included in the base bid. This will be clarified with Addendum 4. The fire pump. Additionally, Alternate #A2 is also now included on the bid form. All alternates have been updated on the revised bid form for contract B-23	4

114	8/1/2023	Architectural	A702 & A703	Connolly Flooring	On detail 2/A702, 1/A703 and 4/A703, all showing east elevations, there appear to be a finish material other than GWB graphically showing, however no notes indicating what this material is. The finish schedule on A105 notes GWB. Please advise on what the wall finish should be.	The pattern denotes thin brick (BK-2). Refer to wall types for thin brick locations.	4
115	8/1/2023	Electrical		Nickle	Did Alternate for extended parking lot get deleted? It is still shown on Drawing E-400 but has been removed from the revised bid form in Addendum 3	Alt #A1 has been added to bid form. See Addendum 4 attachments.	4
116	8/1/2023	Electrical		Nickle	Please provide location and electrical requirements for Fire Pump in Alternate B6.	A fire pump is no longer required.	4
117	8/1/2023	Electrical		BW Electric	The B-23 Electrical Bid form in Addendum 3 does not appear to address all the Alternates, please provide.	<p>B-23 bid form includes the following alternates: Alt #A1 - Flagpole Alt #B3 - Harrington Room Features Alt #B5 - Site Sign Alt #B6 - Fire Pump - This will no longer be an alternate per the RFI response below.</p> <p>Per Addendum 3 and the RFI responses below, the cover lighting noted for the Harrington room is to be included in Alt #B3. The motorized shade alternate noted was a mistake by the design team, is not an alternate, and is to be included in the base bid. This will be clarified with Addendum 4. The fire pump.</p> <p>Additionally, Alternate #A2 is also now included on the bid form.</p> <p>All alternates have been updated on the revised bid form for contract B-23</p>	4
118	8/1/2023	Flooring		Old World Tile	The answer to RFI 2 in addendum 3 states that room 135 should be part of add alternate B-4. The answer to RFI 98 in addendum 3 states that room 135 is not part of add alternate B-4. Which is correct?	Room 135 is part of ADD Alternate B-4, Base Bid only.	4
119	8/1/2023	Flooring		Old World Tile	The rubber base is listed as 6" on the finish schedule and 4" in the specs. Which height is correct?	4" is correct.	4
120	8/1/2023	Flooring		Old World Tile	We are aware that CWT-1 is listed as the base for restroom locations. This product is most likely a glazed ceramic (we were not able to confirm this) which means the edges are not finished. The manufacturer offers a 2x6 and a 2x8 bullnose. Should one of these two be provided as the base?	<p>CWT-1 shall be Triton II/Greige 4x16 Gloss. CWT-2 shall be Triton II/Antique 4x16 Gloss. CWT Base shall be Triton II/Greige 4x8 Gloss Bullnose. If Add Alternate B-4 is selected then CWT base is not required and CWT-1 will extend to floor.</p>	4
121	8/1/2023	Flooring		Old World Tile	If the intent is for a field tile to be used as a base, does a schluter trim need to be provided to cap the exposed edge? If so, specify a Schluter product, and finish. For example: Schluter Schiene in a Satin Anodized Aluminum finish.	<p>CWT-1 shall be Triton II/Greige 4x16 Gloss. CWT-2 shall be Triton II/Antique 4x16 Gloss. CWT Base shall be Triton II/Greige 4x8 Gloss Bullnose which replaces need for a Schluter Trim. If Add Alternate B-4 is selected then CWT base is not required and CWT-1 will extend to floor.</p>	4
122	8/1/2023	Plumbing		DegliObizzi	Please provide model number for the L-1 sink	Model-No. 235350, wall-mount	4
123	8/1/2023	Plumbing	P-300	DegliObizzi	Please provide a make and model for the recirc pump on detail 6 on P-300	Grundfos UPS15-35SFC 1/40 HP, 115V. Provide electrical circuit. Provide Grundfos 595657 aquastat. Provide Grundfos 599388 Timer.	4
124	8/1/2023	Plumbing		DegliObizzi	Please confirm that the site contractor will be providing the water meter for the domestic water feed.	<p>Water meter is shown on Civil drawings and will be removed from Plumbing drawings.</p> <p>Site Contractor will be providing meter pit. Meter by City of Harrington.</p>	4
125	8/1/2023	Flooring		Creative Flooring	Specifications call for 5% (not less than 20sy) attic stock for carpet. For CPT2, which is entrance carpet tile, this will require more material as we are actually having to install and will be a significant dollar amount (roughly \$1,500). Is attic stock actually required for CPT2?	5% is required, but the 20sy minimum is waived.	4



ARCHITECTURE
ENGINEERING

ADDENDUM 4

OWNER
ARCHITECT
CONSULTANTS
CONTRACTOR
FIELD
OTHER

X Harrington Public Library
X Becker Morgan Group, Inc.
X Baker, Ingram, & Associates, CMTA Inc.
X EDiS Company
☐
☐

DATE: 08/02/2023
PROJECT: Harrington Public Library
PROJECT NO: 2013138.06

You are hereby directed to execute promptly this Field Memo that interprets the Contract Documents or orders minor changes in the Work without change in Contract Sum or Contract Time.

If you consider that a change in Contract Sum or Contract Time is required, please submit your itemized proposal to the Architect immediately and before proceeding with this Work. If your proposal is found to be satisfactory and in proper order, this Field Memo will in that event be superseded by a Change Order.

Description:

1. Drawing S101:
 - a. **REPLACE** sheet with attached for revisions to clouded piers, base plates, slab note and footing schedule.
2. Drawing S102:
 - a. **REPLACE** sheet with attached for revisions to clouded beam elevations and removal of W12 beams.
3. Drawing S103:
 - a. **REPLACE** sheet with attached for added section cut and text.
4. Drawing S301:
 - a. **REPLACE** sheet with attached for revised pier and base plate details.
5. Drawing A101:
 - a. **REVISE** room name from 'Fire Pump 141' to 'Storage 141'.
 - b. **ADD** metal stud chase to accommodate rain leader and hose bibb piping in Chairs 104 and Children's Program 123.
6. Drawing A102:
 - a. **ADD** grids 21.5 and 26.3 (per last addendum) to match structural.
 - b. **ADD** sim. details throughout.
 - c. **ADD** Detail 5/A510.
7. Drawing A103:
 - a. Detail 1:
 - i. **ADD** sim. roof details throughout.
 - ii. **REVISE** roof screen note to, "ROOF SCREEN - PREFINISHED PERFORATED ALUMINUM PANEL ON GALVANIZED FRAME - SEE STRUCT."
 - iii. **REVISE** taper at canopy roofs.
 - iv. **REVISE** note at Children's Collection Alcove Thru-Wall Scupper to "WELDED ALUM.

THRU-WALL SCUPPER WITH DOWNSPOUT."

b. Roof Notes and Legend:

- i. **ADD** note, "ROOF SCREEN PANEL BASIS OF DESIGN IS CENTRIA BR5-36 OR EQUIVALENT BY OTHER MANUFACTURER - PATTERN - REVERSE, 1/8" DIA. HOLES, 1/4" SPACING, 23% OPEN AREA."

8. Drawing A104:

a. Detail 1:

- i. **REVISE** lights and GRDs to be flush in grid (not clouded for clarity).
- ii. **REVISE** light layout in Adult Collection (not clouded for clarity).
- iii. **REVISE** note, "2' - 0" O.C. WOOD JOIST CEILING SANDED WITH CLEAR FINISH" in Chairs 104.
- iv. **REVISE** note, "2' - 0" O.C. WOOD JOIST CEILING SANDED WITH CLEAR FINISH" in Tables 105.
- v. **REVISE** note, "2' - 0" O.C. WOOD JOIST CEILING SANDED WITH CLEAR FINISH" in Teen Lounge 118.
- vi. **REVISE** ceiling height at Teen Lounge 118.
- vii. **ADD** details 9 and 10/A510.
- viii. **ADD** callout 5/A510 (detail submitted in previous addendum).
- ix. **ADD** note, "3" x 3" PTD. STEEL FRAME" at Circulation 114.
- x. **REVISE** (2) light fixtures from Harrington Room 119 to Teen Lounge 118.
- xi. **REVISE** note to "HVLS FAN, TYP. SEE MECH."

b. Detail 3:

- i. **ADD** angle dimensions.
- ii. **ADD** metal stud bracing and note, "METAL STUD BRACING AS REQ'D."
- iii. **REVISE** location of light fixtures.

c. Detail 4:

- i. **ADD** angle dimensions.
- ii. **ADD** metal stud bracing and note, "METAL STUD BRACING AS REQ'D."
- iii. **REVISE** location of light fixtures.

d. Ceiling Legend:

- i. **REVISE** graphical intent of GRDs and lights to match RCP.
- ii. **ADD** Raceway and note.

9. Drawing A105:

a. Detail 1:

- i. **REVISE** dimension string for MB-2.

b. Finish Schedule Legend:

- i. **ADD** CWT-1 Base type.
- ii. **REVISE** CWT-1 and CWT-2 Ceramic Wall Tiles with color information.

10. Drawing A107:

a. Detail 8:

- i. **ADD** 5/A107 elevation tag.

11. Drawing A201:

a. Detail 1:

- i. **ADD** MCM-1 and MCM-1 fascia at canopy and note.

b. Detail 2:

- i. **REVISE** location of lambs tongue and note.
- ii. **REVISE** location of hose bibb.
- iii. **REVISE** note at scupper to "WELDED ALUM. THRU-WALL SCUPPER WITH DOWNSPOUT."
- iv. **ADD** MCM-1 and MCM-1 fascia at canopy and note.

c. Detail 4

- i. **ADD** MCM-1 and MCM-1 fascia at canopy and note.

12. Drawing A301:

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- a. Detail 1:
 - i. **ADD** sim. roof detail along grid 17.
 - b. Detail 2:
 - i. **ADD** sim. roof detail along grid H.
 - c. Detail 6:
 - i. **ADD** sim. roof detail along grid 14.
 - ii. **ADD** Detail 5/A521 along grid 28.
13. Drawing A302:
- a. Detail 2:
 - i. **DELETE** roof expansion joint and note.
14. Drawing A303:
- a. Detail 5:
 - i. **REVISE** detail to 7/A511.
15. Detail A304:
- a. Detail 1:
 - i. **REVISE** to match detail 1/A510.
 - b. Detail 2:
 - i. **REVISE** to match detail 3/A521.
 - c. Detail 3:
 - i. **REVISE** to match detail 1/A510
 - d. Detail 4:
 - i. **REVISE** to match detail 3/A521
 - e. Detail 5:
 - i. **ADD** Detail 4/A521.
16. Drawing A501:
- a. Detail 1:
 - i. **ADD** 7/8" hat channel and note.
 - ii. **ADD** metal chase walls and tags.
 - iii. **ADD** rain leader and note.
 - iv. **ADD** dimension string.
 - b. Details 2, 5, and 6:
 - i. **REVISE** metal trim to cover transition membrane.
 - c. Detail 3:
 - i. **ADD** metal chase walls and note.
 - ii. **ADD** rain leader and note.
 - iii. **ADD** 7/8" hat channel and note.
 - iv. **ADD** lambs tongue to detail for coordination and note.
 - v. **REVISE** dimension string.
 - d. Details 7, 8, and 10:
 - i. **ADD** metal trim and note.
17. Drawing A502:
- a. Detail 4:
 - i. **ADD** metal trim and note.
 - b. Detail 5:
 - i. **ADD** dimension.
 - c. Detail 8:
 - i. **REVISE** thin brick wall type.
18. Drawing A510:
- a. Detail 1:
 - i. **ADD** metal trim and note.
 - b. **ADD** Details 9 and 10/A510.

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19. Drawing A511:
- a. Detail 5:
 - i. **ADD** sill flashing and note.
 - b. **ADD** Detail 7/A511.
20. Drawing A521:
- a. Detail 2:
 - i. **REVISE** detail to match structural.
 - ii. **ADD** metal trim and note.
 - b. Detail 3:
 - i. **DELETE** roof expansion joint.
 - c. **ADD** Details 4 and 5.
21. Drawing A522:
- a. Detail 2:
 - i. **DELETE** roof expansion joint.
22. Drawing A523:
- a. Details 1 and 2:
 - i. **ADD** dimensions at coping.
 - b. Detail 4:
 - i. **REVISE** detail to match structural.
 - ii. **ADD** dimensions at coping.
23. Drawing A525:
- a. Detail 1:
 - i. **ADD** 2 ½" Cold Form Stud to match structural.
24. Drawing A602:
- a. SF-6:
 - i. **REVISE** Head detail to 7/A511.
 - b. CW-6:
 - i. **ADD** sim details.
25. Drawing A603:
- a. H10 and H25:
 - i. **REVISE** head flashing to cover transition membrane.
26. Drawing A604:
- a. J10:
 - i. **ADD** metal trim and note.
 - ii. **REVISE** extended mullion note.
 - b. J11:
 - i. **DELETE** caulk joint.
 - c. J16 and J18:
 - i. **ADD** metal trim and note.
 - d. J19:
 - i. **DELETE** caulk joint.
27. Drawing A701:
- a. Detail 9:
 - i. **REVISE** graphical intent.
 - b. Detail 10:
 - i. **REVISE** width of MB-2.
 - c. Detail 13:
 - i. **REVISE** graphical intent
 - d. Detail 15:
 - i. **ADD** dimension at AED.

28. Drawing A702:

a. Detail 2:

- i. **ADD** detail 9/A510.
- ii. **ADD** steel brackets.
- iii. **REVISE** note, "6X12 WOOD BEAM SANDED WITH CLEAR FINISH - ATTACH TO WOOD POST WITH 16" X 4" X 1/4" DECORATIVE STEEL BRACKET, TYP. EA. SIDE".
- iv. **REVISE** note, "6x6 WOD POST SANDED WITH CLEAR FINISH".

29. Drawing A703:

a. Detail 4:

- i. **ADD** detail 10/A510.
- ii. **REVISE** note, "2' - 0" O.C. WOOD JOIST CEILING SANDED WITH CLEAR FINISH".

b. Detail 5:

- i. **ADD** detail 9/A510.
- ii. **REVISE** note, "6x6 WOOD POST SANDED WITH CLEAR FINISH".
- iii. **REVISE** note, "6X12 WOOD BEAM SANDED WITH CLEAR FINISH - ATTACH TO WOOD POST WITH 16" X 4" X 1/4" DECORATIVE STEEL BRACKET, TYP. EA. SIDE".
- iv. **REVISE** note, "2' - 0" O.C. WOOD JOIST CEILING SANDED WITH CLEAR FINISH".

c. Detail 6:

- i. **REVISE** note, "6x6 WOD POST SANDED WITH CLEAR FINISH".
- ii. **REVISE** note, "6X12 WOOD BEAM SANDED WITH CLEAR FINISH - ATTACH TO WOOD POST WITH 16" X 4" X 1/4" DECORATIVE STEEL BRACKET, TYP. EA. SIDE".
- iii. **REVISE** note, "2' - 0" O.C. WOOD JOIST CEILING SANDED WITH CLEAR FINISH".
- iv. **REVISE** crop region for clarity.

30. Drawing P-001:

- a. **ADD** Flow Test Data.

31. Drawing P-101:

- a. **REVISE** FP pipe diameter from 4" to 6".
- b. **REVISE** location of NFWH and DN-1 and associated piping to be within new chase in CHAIRS 104.
- c. **REVISE** location of 4" RL and WCO to be within new chase near OFFICE 133.
- d. **REVISE** location of NFWH and 3/4" CW line to be within new chase in OFFICE 133.
- e. **REVISE** location of DN-1 AND NFWH and reconfigure associated piping to drop into new chase in CHILDREN'S PROGRAM 123.
- f. **DELETE** Sheet note #1 since a fire pump is no longer required.

32. Drawing P-200:

- a. View 1: **REVISE** location of ORL and CW piping to be within new chase.
- b. View 3: **REVISE** FP pipe diameter from 4" to 6".
- c. **DELETE** water meter and water meter bypass from Mechanical Room. Water meter scope is on Civil Drawings.

33. Drawings P-200, P-300:

- a. **ADD** HWR recirculation pump in Mechanical Room.

34. Drawing P-300:

- a. **ADD** model number for L-1.

35. Drawing M-101:

- a. **REVISE** location of outside air and exhaust ductwork from Large Conference Room 103 to Gallery 102.

36. Drawing M-201:

a. **ADD** note indicating that exhaust flue for Boiler and Water Heater to be Stainless Steel.

37. Drawing E-100:

a. **DELETE** tagged note E15.

38. Drawings E-100, E-502:

a. **ADD** roller shades and circuited to Large Conference Room 103.

39. Drawings E-200, E-400, E-500, E-501

a. **REVISE** spelling.

40. Drawings E-200, E-501:

a. **ADD** new circuit and drawing note for RCP-1 in Mech 131.

b. **DELETE** power for access control panel.

41. Drawing E-400:

a. **ADD** new L7 pole fixture on site plan and Site Fixture Schedule.

42. Drawing E-500:

a. **ADD** sheet note 10 to riser diagram.

43. Drawing E-601:

a. **REVISE** detail 5.

Attachments:

Baker, Ingram, & Associates drawings S101, S102, S103, and S301 dated 08.01.2023

Becker Morgan Group, Inc. drawings A101, A102, A103, A104, A105, A107, A201, A301, A302, A303, A304, A501, A502, A510, A511, A521, A522, A523, A525, A602, A603, A604, A701, A702, and A703 dated 08.01.2023

CMTA, Inc. drawings P-001, P-101, P-200, P-300, M-101, M-201, E-100, E-200, E-400, E-500, E-501, E-502, and E-601, dated 08.01.2023

ARCHITECT: Becker Morgan Group, Inc.

BY: Craig Williams, AIA
